

**The Photographer as Environmental Activist: Politics, Ethics & Beauty in  
the Struggle for Environmental Remediation**

By

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A Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award  
of Doctor of Philosophy at Loughborough University

December 2014

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## Abstract

This practice-based research study examines two questions in an effort to determine how the photographer can play a role in the promulgation of environmental activism. Firstly, I ask if certain aesthetic approaches to the documentation of industrial pollution can be regarded as antithetical to the values of environmentalism; in particular, I examine the use of the sublime and the role that beauty plays in documenting scenes of environmental despoliation. In response to this question, I describe the problems associated with establishing a counter-aesthetic position in my artistic practice, which is commensurate with environmental ethics. Secondly, I ask how photography can be used as a means of conducting environmental protest by working in solidarity with environmental scientists and activists, in the struggle for environmental remediation. In a bid to answer this question, I argue that the production and dissemination of the photobook is one method of realising the dissensual capacity of art to bring about the conditions necessary for remediation to occur.

Importantly, my practice proceeds through an understanding of debates ongoing in contemporary theory. In particular, I argue that Jacques Rancière's conceptions of '*dissensus*' (Rancière, 2010: 173) and the 'politics of aesthetics' (Rancière, 2004: 25) can be interpreted as a means of understanding how aesthetics can be used to enact a form of political praxis. Using Rancière and Murray Bookchin's concept of social ecology as a basis for my artistic practice, I claim that photography can not only make the existent reality of pollution visible, it can also initiate a form of participatory democratic subjectivity, allowing the demands of the artist to become visible too. Moreover, in the design and dissemination of the three photobooks I have created, I make a case for a collaborative model of artistic practice, which extends beyond the medium specificity of photograph, and embraces multimodality and trans-disciplinarity, as a means of situating the photograph into a broader discursive field.

<b>Table of Contents</b>	<b>Pages</b>
Acknowledgements	5
List of Illustrations	6
<b>Introduction</b>	
Preface	10
The Research Questions	13
Methodology	15
Contextual Review	20
Chapter Synopsis	40
<b>Chapter 1: Photographs of Industrial Pollution: Ethical Problems</b>	
1:1 Introduction	43
1:2 Visualising Capital at Work: Carleton Watkins' Malakoff Diggins Series	45
1:3 J.A. Todd's Testimony, The Photograph as Evidence	50
1:4 The 'Clinch' Images, A Counter-Aesthetic Approach to Watkins & Todd	56
1:5 Robert Adams & the Photographer's Bargain (with Capital)	63
1:6 Edward Burtynsky's Industrial Sublime	66
1:7 Conclusion	75
<b>Chapter 2: The Photographer as Environmental Activist</b>	
2:1 Introduction	77
2:2 The Political Backdrop of <i>Bravo 20</i>	78
2:3 From Satire to Protest	82
2:4 Environmentalism vs. Conservationism	86

2:5 Art, Text and Propaganda	92
2:6 Conclusion	103
<b>Chapter 3: An Ethical Photographic Practice</b>	
3:1 Introduction	104
3:2 Beauty and the Ugly Subject	105
3:3 The Activist's Perspective	114
3:4 The Informed Audience I	119
3:5 The Informed Audience II	129
3:6 Conclusion	138
<b>Chapter 4: An Activist Photographic Practice</b>	
4:1 Introduction	140
4:2 Aesthetics as Politics	141
4:3 A Postal Protest	149
4:4 Multimodality as Representational Strategy	159
4:5 Collaborative Working Practices	166
4:6 Conclusion	178
<b>Thesis Conclusion</b>	180
<b>Appendix</b>	
i. Correspondence with Christine Hult-Lewis 04/11/2012	189
ii. <i>Almásfűzitő: An Index</i> , contextual information	190
iii. <i>Mynydd Parys &amp; Afon Goch</i> , contextual information	195
iv. <i>No Al Carbone, Brindisi</i> , contextual information	200
<b>Bibliography</b>	204



## Acknowledgements

This thesis would not have been possible without the generous funding of Loughborough University, School of the Arts.

In particular, I am grateful to my supervisors Jane Tormey and Johanna Hällsten at Loughborough University, School of the Arts for their help and support throughout the course of my research. Additionally, I would also like to thank Malcolm Bernard, Marsha Meskimmon, Marion Arnold and Simon Downs for their insight and evaluations along the way.

I would also like to thank my artistic collaborators at Environmental Resistance for their ongoing help and support—firstly I would like to thank Victoria Redman for her skills as a graphic designer in producing the infographs, typesetting and designing the cover art in the projects *Mynydd Parys & Afon Goch* and *No Al Carbone, Brindisi*. Secondly, I would like to thank Will Mayes of University of Hull (CEMS) for his input, analysis and evaluations as an environmental scientist; without Will's scientific knowledge the development in my artistic practice would not have been possible. Lastly, I would like to acknowledge Emma Ward's skills as both an interpreter and translator in the *No Al Carbone, Brindisi* project. Lastly, I would like to thank Martin Bedford for his design work on *Almásfüzitő: An Index*.

Above all, I would like to dedicate this thesis to my parents, Irene & Peter, for their unwavering support and indefatigable belief in me.

<b>Fig. No</b>	<b>List of Illustrations</b>	<b>Pages</b>
Fig. 1.	Conohar Scott, <i>Asbestos Loading Bucket</i> , taken from the <i>Edge of Eden</i> series (2006).	11
Fig. 2.	Brookes slave ship, <i>Society for Effecting the Abolition of the Slave Trade</i> , (1788).	18
Fig. 3.	Ed Ruscha, double page spread from <i>Twenty six Gasoline Stations</i> (1962).	22
Fig. 4.	Mishka Henner, <i>Coronado Feeders, Dalhart, Texas</i> (2013).	24
Fig. 5.	Barry Commoner, <i>Time Magazine</i> , (Feb. 2 <sup>nd</sup> , 1970).	27
Fig. 6.	Carleton Watkins, <i>1083: Malakoff Diggins, Looking Northeast, near North Bloomfield, Nevada County</i> (1871).	47
Fig. 7.	Carleton Watkins, <i>1092: Malakoff Diggins, near North Bloomfield, Nevada County</i> (1879-81).	48
Fig. 8.	J.A. Todd, <i>View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr Briggs and Mr Riggs</i> (1883).	53
Fig. 9.	‘Clinch’ photographs (1) <i>US vs. North Bloomfield Mining Company</i> , (1897-1899).	56
Fig. 10.	‘Clinch’ photographs (2) <i>US vs. North Bloomfield Mining Company</i> , (1897-1899).	57
Fig. 11.	‘Clinch’ photographs (3) <i>US vs. North Bloomfield Mining Company</i> , (1897-1899).	58
Fig. 12.	Edward Burtynsky, <i>Iberia Quarries No.3, Portugal</i> (2006).	68
Fig. 13.	Edward Burtynsky, <i>Mines # 22 Kennecott Copper Mine, Bingham Valley, Utah</i> (1983).	71
Fig. 14.	David T. Hanson, <i>California Gulch, Leadville, Colorado</i> (2005).	74
Fig. 15.	Richard Misrach, illustration showing some of the proposed national park features, taken from <i>Bravo 20: The Bombing of the American West</i> (1990).	83
Fig. 16.	Ansel Adams, <i>Monolith, the Face of Half Dome</i> , (1927).	89
Fig. 17.	Richard Misrach, <i>Crater and Destroyed Convoy</i> (1990).	90
Fig. 18.	Extract from the guestbook in the Sheppard Gallery in the University of Nevada, Reno (1991).	93

Fig. 19.	Richard Misrach, <i>Dead Fish</i> (1990).	94
Fig. 20.	Lewis Baltz, <i>Park City #52</i> , (1979).	96
Fig. 21.	Michael Schmidt, <i>Untitled</i> (1), from <i>Lebensmittel</i> , (2006-2010).	98
Fig. 22.	Michael Schmidt, <i>Untitled</i> (2), from <i>Lebensmittel</i> , (2006-2010).	101
Fig. 23.	Lewis Baltz, <i>Park City 37. Park Meadows, Subdivision 3, Lot 39, Looking Northwest</i> , (1979).	107
Fig. 24.	Conohar Scott, <i>Almásfüzitő Plate 7</i> , Diptych: right panel, (2012).	108
Fig. 25.	Conohar Scott for Environmental Resistance, <i>Bull Bay, Mynydd Parys &amp; Afon Goch</i> (2014).	111
Fig. 26.	John Darwell, <i>Karagod, One of seventy abandoned villages in the zone</i> , taken from <i>Legacy: Photographs Inside the Chernobyl Exclusion Zone</i> (2001).	113
Fig. 27.	Conohar Scott, <i>Almásfüzitő Plate 3</i> , Diptych: right panel, (2012).	114
Fig. 28.	Conohar Scott for Environmental Resistance, <i>untitled, Mynydd Parys &amp; Afon Goch</i> (2014).	118
Fig. 29.	Conohar Scott, text plate (Diptych L) <i>Almásfüzitő: An Index</i> (2012).	122
Fig. 30.	Conohar Scott for Environmental Resistance, sample gatefold (right) <i>Mynydd Parys &amp; Afon Goch</i> (2014).	124
Fig. 31.	Andreas Müller-Pohle, <i>Dunaújváros, Hungary</i> , taken from <i>The Danube River Project</i> (2007).	127
Fig.32.	Conohar Scott for Environmental Resistance, <i>Porto Medio, No Al Carbone, Brindisi</i> (2014).	130
Fig. 33.	Environmental Resistance, <i>Porto Medio</i> (caption), <i>No Al Carbone, Brindisi</i> (2014).	131
Fig.34.	Michelangelo Antonioni, still taken from <i>Red Desert [Il deserto rosso]</i> (1964)	133
Fig.35.	Conohar Scott for Environmental Resistance, <i>untitled</i> (final image), <i>No Al Carbone, Brindisi</i> (2014).	136

Fig.36.	Environmental Resistance, <i>Solar Tree and Acknowledgements</i> (final caption), <i>No Al Carbone, Brindisi</i> (2014).	137
Fig. 37.	Conohar Scott, list of recipients, <i>Almásfüzitő: An Index</i> (2012).	149
Fig. 38.	Conohar Scott, package returned unopened, <i>Almásfüzitő: An Index</i> (2012).	152
Fig.39.	Mark Neville, photograph taken from the series <i>Deeds Not Words</i> , (2011).	156
Fig. 40.	Conohar Scott for Environmental Resistance, gatefold detail, <i>Mynydd Parys &amp; Afon Goch</i> (2014).	161
Fig. 41.	Kate Orff, <i>Requiem for a Bayou</i> , taken from <i>Petrochemical America</i> (2012).	162
Fig. 42.	Environmental Resistance, caption: <i>Illegal dispersal of coal dust, No Al Carbone, Brindisi</i> (2014).	169
Fig. 43.	Conohar Scott (second left) & Emma Ward (centre) of Environmental Resistance in conversation with Daniele Pomes (right) of No Al Carbone, on the 'Veleni Tour 2014'. Image courtesy of NAC (2014).	170
Fig. 44.	A passenger on the 'Veleni Tour 2014', using their ticket to download the <i>No Al Carbone</i> publication. Image courtesy of NAC (2014).	171
Fig. 45.	Cosimo Consales (the Mayor of Brindisi) receiving his copy of the <i>No Al Carbone</i> publication during the 'Veleni Tour 2014'. Image courtesy of NAC (2014).	172
Fig. 46.	Conohar Scott for Environmental Resistance, <i>untitled, No Al Carbone, Brindisi</i> (2014).	174
Fig. 47.	Daniele Pomes of No Al Carbone using the photobook to describe the Micorosa fly ash pond, which is located on the opposite side of the fence behind, during the 'Veleni Tour 2014'. Image courtesy of NAC (2014).	176
Fig. 48.	Environmental Resistance, front cover design, <i>Almásfüzitő: An Index</i> , 2 <sup>nd</sup> Edition (2014).	190
Fig.49.	Map showing the location of Almásfüzitő in Hungary, courtesy of GoogleEarth (2014).	190
Fig. 50.	Conohar Scott, Google Satellite map showing my path of entry into Almásfüzitő Pond 7 (in blue) and the location of the stationary security guards (in yellow).	191

Fig. 51.	Environmental Resistance, front cover design, <i>Mynydd Parys &amp; Afon Goch</i> (2014).	195
Fig.53.	Map showing the location of Mynydd Parys & the Afon Goch River, Anglesey, Wales. Image courtesy of GoogleEarth (2014).	195
Fig. 54.	Environmental Resistance, front cover design, <i>No Al Carbone</i> (2014).	201
Fig.55.	Map showing the location of Brindisi, Italy. Image courtesy of GoogleEarth (2014).	201

## Introduction

### Preface

My interest in the photographic documentation of industrial pollution first emerged, almost by accident, over a decade ago when I was photographing a project for a Masters degree course. My Masters project concerned a small town in Vermont called Eden, and I was attracted to this obscure town-land close to the Canadian border because the poet Federico García Lorca once spent a summer there. There are two aspects to Eden's history that makes the town memorable, and this is one of them. At the time, I had a fascination with Lorca, which came out of a holiday to Granada whereupon I had learnt of the poet's murder during the Spanish Civil War. As a newcomer to photography, I had little idea as to what sort of work I wanted to make and no real knowledge of Critical Theory, so the idea of travelling to Eden resembled the act of randomly sticking a pin into a map and going there. Admittedly, I had researched the history of Eden before setting off, and I was aware of the town-land's second memorable claim— Eden once hosted the USA's largest asbestos mine.

My visit to Eden resulted in my documentation of the abandoned asbestos mine (Fig.1) without having a clearly defined ethical stance towards the subject matter I was photographing. I was simply there, photographing what I had discovered. The mine had closed in the late 1990s, when Federal Law had made it illegal to mine asbestos in the US overnight, but no funds were allocated to cleaning up the site, and the owner of the land was not obliged to take any action; so the asbestos mine remained as it was on the last day of production. In covering the mine at Eden I conducted no protest, I appealed to no one, I took no ethical position. I maintained only a flawed objectivity – it was enough to photograph the mine and leave with my trophies. The location and the subject matter I documented were considered credible because the space signified the presence of a social taboo, in the form of asbestos. Photographing in such an extreme location gave me credibility as a practitioner who was capable of discovering this hinterland in another

continent, but I have to admit that without a coherent argument as to *why* I was photographing an asbestos mine in Vermont, my motivations could be considered more self-centred than I care to admit. Regrettably, I had not stopped to ask myself *who* my audience was, and if the photographs would ever be shown to the local community, government officials or environmental organisations. My impetus for undertaking this research project can therefore be understood as an attempt to develop a form of artistic practice which is commensurate with the ethical values of environmentalism, and capable of answering the question: *why photograph?*



Fig. 1. Conohar Scott, *Asbestos Loading Bucket*, taken from the *Edge of Eden* series (2006)

The three photobooks that form the basis of my artistic submission represents an attempt at discovering a model of photographic practice that could lend itself to the question – *why photograph?* Although the number of copies published on each occasion was very modest (typically each edition was limited to 25 copies), the submission of the publications for legal deposit in the UK demonstrates my commitment to the provision of public knowledge. In chronological order of development the three projects are:

1. *Almásfüzitő: An Index* (Environmental Resistance, 2014a)
2. *Mynydd Parys & Afon Goch* (Environmental Resistance, 2014b)
3. *No Al Carbone, Brindisi* (Environmental Resistance, 2014c)

The reader should note that prior familiarity with the three publications, which constitute the basis of my artistic practice, would greatly benefit an understanding of the written component of the thesis. If the reader turns to the *Appendix ii-iv*, a brief summary of the background to each project is outlined in order to provide a contextual understanding of the projects discussed. Lastly, the reader should be aware that the project *Almásfüzitő: An Index* initially predated the establishment of the Environmental Resistance collective. With the exception of one book, all of the copies in the first print run were disseminated across Europe. The book was subsequently reissued under the banner of Environmental Resistance, following the European Commission's ruling, which validated the claims made in the initial publication.



## The Research Questions

In the course of formulating a research question, I had great difficulty in narrowing my research objectives into a singular sentence. To begin with, I attempted to sum up the objectives of my study by using only one research question: 'Can landscape photography promote the values of environmental activism?' However, as my photographic practice increasingly became focused on (1) the production of photobooks, (2) collective working practices, (3) the multimodal integration of the photograph with other forms of text I soon became dissatisfied with the phrase 'landscape photography'.

Through the course of my research, I realised that it was my intention to develop an overtly politicised form of photographic practice, which sought to address the problems associated with photographing industrial pollution, by providing information extraneous to the photograph such as environmental science data etc. I became increasingly concerned that the term 'landscape photography' could be considered as inadequate description of the art objects I was constructing. In an effort to improve upon my first attempt at a research question I decided to frame my question in the simplest possible terms: 'How can photography be used as a means of conducting environmental protest?' This second version of my question had the advantage of disassociating my practice from the genre of 'landscape photography', which I felt implied that the photograph *alone* occupied a central position of importance in the construction of the artwork.

I soon came to realise that by restricting my research question to the singular issue of how I was going to situate my photographic practice, in order to achieve my environmentalist objectives, I was missing out on a vital secondary debate concerning the ethical implications of representing industrial pollution through the medium of photography. Indeed, from an environmentalist's perspective, I wondered if the concept of an ethical photographic practice was possible at all. In my use of the term 'ethics', it is important to state from the outset, that my interest was to examine the efficacy of various

and contrasting aesthetic approaches to the photographic documentation of environmental despoliation. Specifically, I was interested in the ethical problems arising from the use of aesthetic qualities such as 'beauty' or 'the sublime', when the subject matter of the photograph involves representations of environments which have been poisoned by pollutants.

As my research questions progressed, I realised it was important to question the role that aesthetics plays in normalising or even glamorising acts of environmental destruction. Before I could proceed with identifying how I could use photography to conduct environmental protest, it therefore became necessary to question the ethics of my aesthetic approach to the documentation of pollution. Such considerations led me to separate ethical debates concerning the representation of industrial pollution from the problems associated with using photography as a form of political praxis. The result was the formation of two interrelated but independent research questions:

- 1) What are the ethical implications of photographing industrial pollution?
- 2) How can photography be used as a means of conducting environmental protest?

The separation of aesthetic concerns from 'politics' in the two research questions allowed for the opportunity to discuss the work of other photographers, in order to arrive at a point in my research where I could argue that my photographic practice was ethically defensible and in accordance with my environmentalist objectives. From this initial starting point, my second research question presented the opportunity to consider how to disseminate my practice, in order to best achieve my political motivations, which involved raising awareness of environmental issues in the locations I had photographed.

## Methodology

In this practice-based research study, my methodology is comprised of two distinct threads. The first is ‘history’, by which I mean the history of photography in relation to the documentation of industrial pollution. My approach to making photographs is informed by history; without an historical and philosophical understanding of my subject area it would be impossible to make a cogent decision about the direction and development of my artistic practice. The second thread of my methodology refers to the process of identifying and undertaking projects, which is a collaborative process, for the purposes of exacting change in the social imaginary. For this methodological category, I rely upon the concept of ‘advocacy’ as described by the Tactical Technology Collective (2014).

## History

It is significant that chapters one and two are comprised of an historical analysis of the work of various USA photographers. The photographic documentation of mining enterprises, as well as the construction of other industrial incursions into the landscape, such as the building of the railroad, holds a unique position in the USA’s formation as a nation. I argue that since the time of pioneering photographers such as Carleton Watkins, photography has functioned as a source of ‘propaganda’ (Marien, 1993: 9) for capital’s despoliation of the land, and that this cultural history continues to have an influence on contemporary North American photographers such as Edward Burtynsky.

What is less well known, however, is an alternate history of US photography in which photography has played a key role in the struggle to convict industrial polluters and bring about environmental remediation. Here my analysis of two additional 19<sup>th</sup> photographers, J.A. Todd and ‘Clinch’, are especially significant to my research concerning the origins of a proto-environmentalist photographic practice. Furthermore in chapter two

of my thesis, I extend my argument concerning the photographer as environmental activist into a 20<sup>th</sup> century context, with an extended discussion on Richard Misrach's *Bravo 20* (1990) photobook.

Taking into consideration that I am an artistic practitioner based in the UK, and that the three projects I undertook as part of my practice where each situated in Europe, I have attempted in chapters 3 & 4 to complement my historical analysis of North American photography with commentaries on the practice of various contemporary European artists. In particular, I examine John Darwell's (201) photographs of the invisibly polluted Chernobyl Exclusion Zone, Andreas Müller-Pohle's synthesis of mineral sample readings and views from the Danube in the *The Danube River Project* (2007); Michael Schmidt's survey of the German food industry in *Lebensmittel* (2012); and Mark Neville's social documentary project *Deeds Not Words* (2011), which raises awareness about congenital deformities occurring in an English town built on an disused steel works. I also stray briefly out of stills photography to make a comparison between my practice and Michelangelo Antonioni's film *Red Desert* (1964).

As an artist concerned with employing photography for the purposes of conducting environmental activism, I consider myself to be in an on-going dialogue with the historical capacity of photography and moving image to act both as a technology for aestheticising environmental despoliation and also for raising social awareness concerning the problems associated with industrial pollution.

## **Advocacy**

At their most effective, visual informational advocacy art objects have the potential to contribute to a transformation of the social imaginary by reifying social and environmental injustices. This thesis attempts to apply the knowledge gleaned from a

historical reading of the photographic documentation of industrial pollution, in order to develop and promulgate the tradition of visual information advocacy, as a means of pursuing activism through the indexical medium of photography. In their publication 'Visualising for Information Advocacy' the activist group known as the Tactical Technology Collective (TTC) provide a neat summation of what the term 'advocacy' means when they state that:

[...] advocates and campaigners collect information that they can then use strategically to influence policy and public debate, expose wrong-doing, push for justice, monitor those in power and regulate public institutions (Tactical Technology Collective, 2014: 9).

As the TTC observe, a crucial aspect to any advocacy campaign is the synthesis of text, photography and infographic imagery, which can be used in concert to describe a given environmental or social problem, in order to impress upon the audience that 'the present situation is bad in some way, and that a particular possible future would be better' (Id.: 21) than the existing status quo. At the heart of the advocacy process is the implicit desire to 'change things from how they are to how they ought to be' (ibid.)

TTC argue that in order for an example of visual information advocacy to be effective, it must engage with the audience in three different ways: 'rational appeal, moral appeal and emotional appeal' (Id.: 9). In the construction of their argument, TTC explain that the pursuit of a 'rational argument' is important because 'we believe that if they are provided with the true facts, [the audience's] ability to reason will allow them to reach the right conclusion' (Tactical Technology Collective, 2014: 9) i.e. that the current status quo is unacceptable. The second form of persuasion is 'moral appeal', which relies upon the assumed ethical convictions of the audience in order to 'recruit them or nudge them into taking a position' (ibid.). Finally, the notion of 'emotional appeal' uses the denotative power of the artwork, which arises from the experience of encountering the aesthetic, in order to 'stir people's empathy and compassion regardless of underlying social norms and personal

notions of justice' (ibid.). Most often all three qualities are used in combination. By such means, information advocacy can bring about new forms of knowledge with regards to how the audience relates to the issues highlighted as part of an activist campaign.

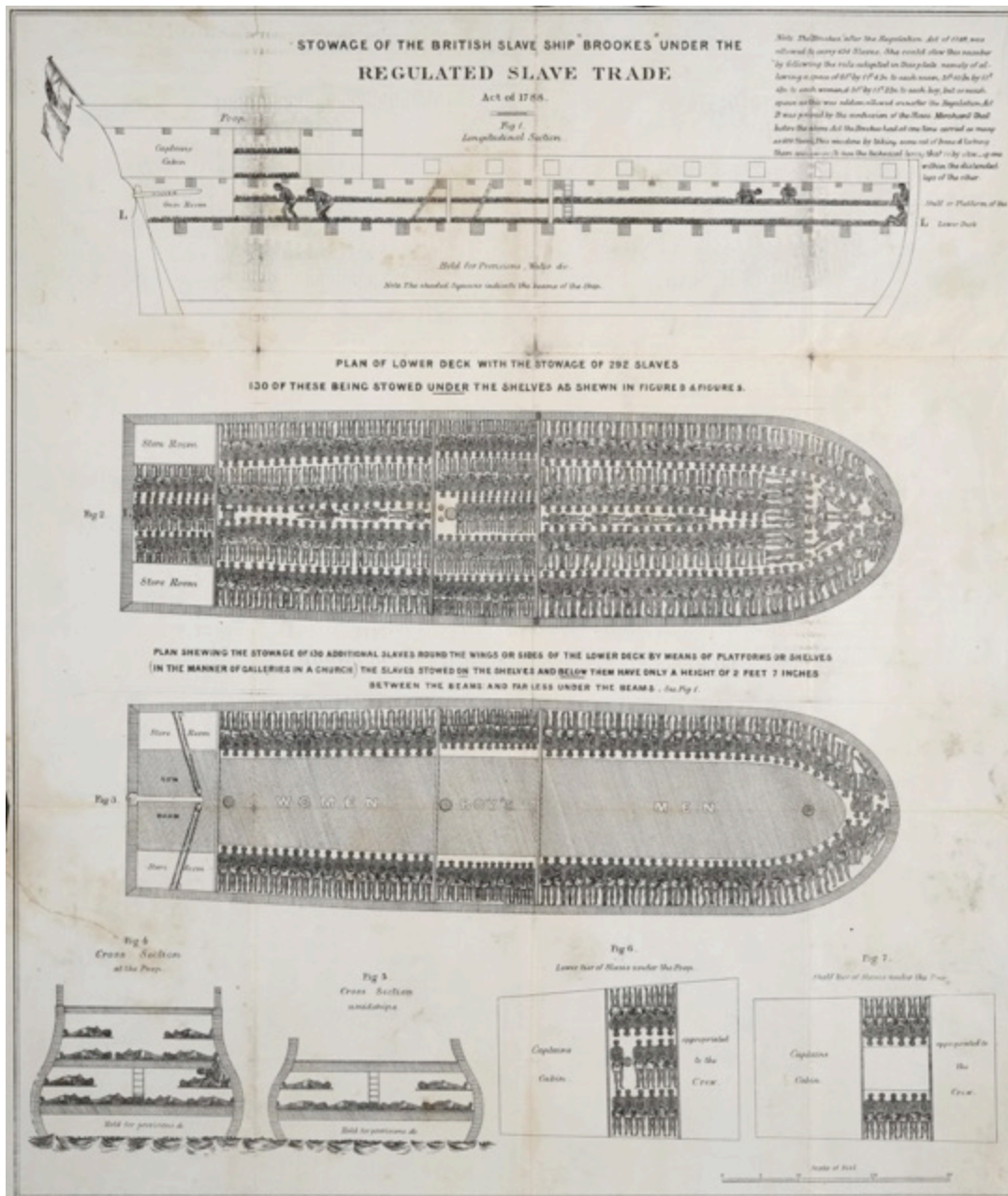


Fig. 2. *Brookes slave ship, Society for Effecting the Abolition of the Slave Trade, (1788).*

In their appraisal of visual information advocacy, TTC point out that the emergence of digital technologies in the contemporary era has resulted in the development of new devices, tools and platforms, which can be used for the collecting, manipulating and sharing of visual objects (Tactical Technology Collective, 2014: 50). The D.I.Y. ethos of digital technology, which is epitomised by the Internet, social media and low cost self-

publishing, has brought about a transformation in how activists communicate campaigns to their audiences. Whilst undoubtedly current technologies offer certain advantages to activists, TTC also argue that visual information advocacy is part of a tradition that can be traced back to earlier libertarian struggles, such as the campaign for the abolition of slavery in the 18<sup>th</sup> century. In particular, TTC point to an infographic diagram of a slave trade vessel called *Brookes* (Fig.2), of which 7,000 copies were distributed by the London based *Society for Effecting the Abolition of the Slave Trade*, in 1788 <sup>1</sup>. As TTC recall, the graphic had a documented and tangible impact on many individuals who viewed it at the time (Clarkson, 1808, cited in Tactical Technology Collective, 2014: 50). In this sense, the artworks I have made during this research project can be considered to be expressions of visual information advocacy in action.

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<sup>1</sup> It should be noted that TTC's claims concerning the origins of visual information advocacy could be disputed and this is an area for further research. For example, Michelle Bogre argues that from a photographic perspective:

[...] the first "activist" images were calotypes made in 1840 by the Scots team of David Octavious Hill and Robert Adamson (known generally as Hill and Adamson) in Newhaven, Scotland, a small fishing village outside Edinburgh. Adamson was more interested in pushing the artistic envelope of the calotype, the "candid" documentary portraits he produced of the fisherfolk are now considered to have sparked the idea that photography could be used as a tool for social awareness' (Bogre, 2012: xii- xv)

## Contextual Review

The subject of this thesis is the photographic documentation of industrial pollution. In the chapters that follow, I largely restrict my analysis to photographers who operated in the west of the United States, specifically in California and Nevada. This decision was taken because at the outset of my research I was keen to discuss a trio of photographers – Carleton Watkins, J.A. Todd and ‘Clinch’ – who were involved in photographing a hydraulic gold mine in California, which was operated by the North Bloomfield Mining and Gravel Company (1866- 1884). In my commentaries on the mine, I am indebted to Christine Hult-Lewis’s (2011a) doctoral thesis on the mining photographs of Carleton Watkins, as well as *Carleton Watkins: The complete mammoth photographs* (2011), which Hult-Lewis published with Weston Naef during the course of my research.

The activities of the North Bloomfield Mining and Gravel Company are of additional interest, because of two relatively unknown photographers: J.A. Todd and ‘Clinch’. Although J.A. Todd’s photographs are not widely known<sup>2</sup>, I argue that he is of interest as he was hired by a group of farmers who successfully brought a collective civil action against the North Bloomfield Mining and Gravel Company, because the mining company had polluted and ruined their land. In my commentaries, I claim that the photographs J.A. Todd made for the *Edward Woodruff vs. North Bloomfield* [1884] trial are of historic importance, because they represent the first instance in US legal history when photography was used as a form of ‘visual testimony’ in order to protest against the effects of industrial pollution.

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<sup>2</sup> I must thank Christine Hult-Lewis for supplying me with a scan of J.A. Todd’s photograph, *View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr. Briggs and Mr. Riggs*, (1883) (Fig. 8), which Hult-Lewis copied with the permission of the California Historical Society, San Francisco, during the course of her doctoral research. From personal correspondence with Hult-Lewis (2012) (see Appendix i), I am aware that the California Historical Society holds seventeen of Todd’s photographs pertaining to the *Edward Woodruff vs. North Bloomfield* [1884] trial; however, it appears that the prints have not been digitised or reproduced elsewhere.



Also of interest are the photographs of an unknown photographer, referred to as ‘Clinch’, because a stamp on the velum of the photographs bears this name (see Appendix i). The ‘Clinch’ photographs are related to a subsequent trial, the *US vs. North Bloomfield Mining Company* [1899], in which the State of California sought reparations from the North Bloomfield Mining and Gravel Company in the aftermath of the *Edward Woodruff vs. North Bloomfield* [1884] proceedings. I discovered the ‘Clinch’ photographs whilst perusing the US National Archives (USA National Archives, 2014). The images that I use in this thesis were downloaded from the USA National Archives website; to the best of my knowledge, the ‘Clinch’ images have never been reproduced elsewhere.

From a contemporary perspective, the ‘Clinch’ photographs are aesthetically striking because they resemble the reductivist and ‘amateurish’ style of the ‘conceptual photographers’ of the 1960s, most notably artists such as Ed Ruscha (1962) (Fig.3), Dan Graham (Graham *et al.* 2009) and Robert Smithson (2006). In my reading of the conceptual art movement of the 1960s I was influenced by Diarmuid Costello’s *Photography After Conceptual Art* (2010), Peter Osborne’s *Anywhere or Not at All* (2013), and also by Jeff Wall’s *Marks of Indifference* (1995), which recounts the reductivist ‘anti-aesthetic’ of the conceptual art movement. Of course, any mention of reductivism must also acknowledge the pictorialism of artists such as Ansel Adams (2001), which the conceptual artists were reacting against (Wall, 1995).

My examination of the North Bloomfield Mining and Gravel Company is complemented by an extended commentary on the photographs of Richard Misrach, specifically his publication *Bravo 20: The Bombing of the American West* (1990). I chose to examine *Bravo 20* because the publication represents an example of a photographer working collaboratively with environmental activists for mutual political purposes. It is significant that Misrach’s study of the Bravo 20 bombardment range in Nevada occurs a century after the photographs of J.A. Todd and ‘Clinch’, and is located only 150 miles to the

east of the North Bloomfield Mining and Gravel Company's site. The geographical proximity of both locations was intended to suggest historical development and congruity in the photographic documentation of industrial pollution in the USA, from the early pioneers of photography to the present era.

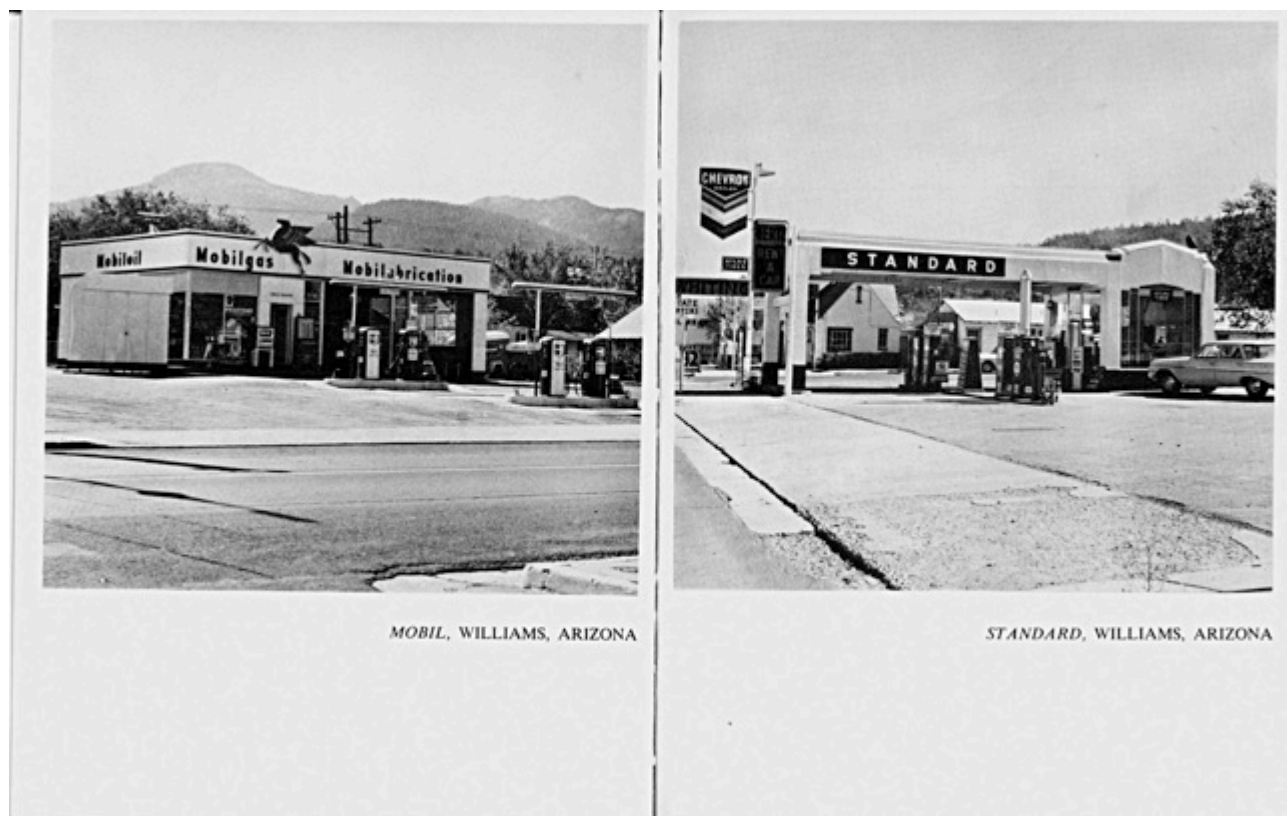


Fig. 3. Ed Ruscha, double page spread from *Twenty six Gasoline Stations* (1962).

My brief commentaries on the medium of the photobook were influenced by the publication, *The Photobook: From Talbot to Ruscha and Beyond* (Di Bello, Wilson & Zamir, 2012); however, I decided not to pursue an in-depth study of the history of photobooks as I felt that the subject had previously been examined (Ronald, 2011). Instead, I decided to focus upon Misrach's *Bravo 20* publication and take a semiotic approach to the analysis of Misrach's text, as well as to that of my own photobooks, an approach which was largely influenced by Roland Barthes' (1977) semiotic concept of 'anchor & relay' and his use of the terms 'detonation' and 'connotation' (ibid.).

My decision to analyse photographs that document the topography as 'site' and 'ecosystem', as opposed to documenting people living or working within a polluted space,

ensured that for the most part I did not reference photographers who have photographed the social affects of pollution. There is one exception to this rule; I briefly touch upon Mark Neville's *Deeds Not Words* (2011) project, but here my attention is directed towards how Neville disseminated his photobook, rather than the actual subject matter of his photography. The decision not to examine social documentation also ensured that I did not discuss a variety of contemporary photographers from a post-colonial perspective, as typified by the work of African photographers such as Nyaba Léon Ouedraogo (2011), Pieter Hugo (2011), and George Osodi (2011), who primarily focus on issues concerning the environmental exploitation of Africa due to the pernicious effects of globalism.

In my commentaries on the photographs of Edward Burtynsky (2003), I was careful to choose examples from Burtynsky's practice that were composed from the ground but which utilised a raised ocular perspective – in Burtynsky's most recent work (Burtynsky, 2009) the artist has increasingly depended upon aircraft and drones to locate his subject matter. My justification for this decision owes much to Denis Cosgrove's (2003) assertion that aerial photography is an abstracted form, which shares much in common with the cartographic tradition. The one exception I make to this rule concerns my brief description of David T. Hanson's (1997) triptych presentations but here I am more concerned with how Hanson contextualises the photograph alongside letters and maps, than I am with the photograph itself. My decision to omit the genre of aerial photography is important because I believe the genre should be regarded as a separate body of literature, which is representative of a long-standing tradition in photography that includes artists such as Emmet Gowin (2002), David Maisel's (2004) and Mishka Henner (2013) (Fig.4).

In my evaluations on aesthetics, I touch briefly on John Darwell's *Legacy: Inside the Chernobyl Exclusion Zone* (2001), as an example of how the photograph as an indexical medium has profound limitations when it comes to documenting industrial pollution. Nowhere is this more apparent than when the pollutants in question are invisible, as is the

case with radionuclides. Rather like the genre of aerial photography, I argue that post Chernobyl and Fukushima the photographic documentation of radioactively poisoned sites is a growing body of literature that is unique and deserves special attention. For this reason, I decided to focus my study upon localised incidents of industrial pollution, which feature to some degree, visible traces of pollution in the form of effluents and other particulate matter.



Fig. 4. Mishka Henner, *Coronado Feeders, Dalhart, Texas* (2013)

My insistence on restricting my research to topographic studies ensures that the collection of photographers referred to as the ‘New Topographers’, remains an important influence on my practice. On a number of occasions, I reference Lewis Baltz’s *Park City* (1980) series and although I do not touch on Robert Adams’ photographs directly, Adams’ (1996) writings on photography are influential in my discussion regarding ethics and the photography of mines (see section 1:5 ‘Robert Adams & the Photographer’s Bargain’).

Furthermore, my reading of the photographers profiled in this thesis owes much to knowledge garnered from a host of commentators who have made significant contributions to the reading of photographs. In particular, I have benefitted from a familiarity with Deborah Bright (1989, 1992), Rebecca Solnit (1999, 2001, 2007, 2010), Andy Grundberg (2010), Lucy Lippard (2011), Liz Wells (2000, 2003, 2011), Martha Rosler (2003), Susan Sontag (1977, 1992, 2003) and Allan Sekula (1978, 2003) and many of the essays that appeared in *Creative Camera* (Brittain, 2000) throughout this thesis.

In my analysis of aesthetics I frequently refer to the concept of multimodality. As Hartmut Stöckl observes, the term multimodal ‘refers to communicative artefacts and processes which combine various sign systems (modes) and whose production and reception calls upon the communicators to semantically and formally interrelate all sign repertoires present’ (Stöckl, 2004: 9). Specifically, in this thesis I use the term ‘multimodality’ to describe the interaction and organisation of various modes – colour photographs, graphic design elements (infographs, icons, illustrations etc.), textual or numeric information and other signs, – which combine to constitute the design components of the photobook. Furthermore, I make a distinction between the photobook and other genres of printed publications, by employing the simple definition of the photobook offered by Jerry Badger when he states that the photobook is ‘a book – with or without text – where the work’s primary message is carried by photographs’ (Badger, 2006, cited in Wells, 2012: 130).

Whilst I am aware of the on-going importance of environmental subject matter in many aspects of contemporary art practice, which is typified by artists such as Brandon Ballengée (2014); by art works as diverse as Hans Haacke’s *Rhinewater Purification Plant* (1972); by The Critical Art Ensemble’s *Free Range Grain* (2003-4), and by exhibitions such as *Yes, Naturally, how art saves the world* (Gevers, 2013); such works once more represent a categorical departure from the photographic documentation of the topography,

as evinced by a photographer such as Richard Misrach in *Bravo 20* (1990). As such, I have chosen to largely restrict my discussion to photographic projects such as Richard Misrach's most recent publication *Petrochemical America* (Misrach & Orff, 2012) or Andreas Muller-Pohle's *The Danube River Project* (2007). In this thesis I make two exceptions to this categorical distinction of photographic practice. The first pertains to my analysis of Michael Schmidt's *Lebensmittel* (2012), which is included because I question if a body of photographs unaccompanied by text i.e. captions, titles, supporting essays etc., can serve to promulgate a coherent political message. The second considers the health implications of living in proximity to the hyper-industrialised landscapes of my *No Al Carbone, Brindisi* project (2014) and here I make a comparison with Michelangelo Antonioni's film *Red Desert [Il deserto rosso]* (1964) because both artworks are set in Italian ports.

## **Environmental Politics**

Arguably, environmentalism as a cultural movement began to take root in Western culture in the early 1960s, when Rachel Carson's polemic novel *Silent Spring* (Carson, 1963) which did much to introduce the American public to the concept of an ecosystem and the poisoning of the food chain by the pesticide DDT. As a form of political activism and as a social movement, environmentalism emerged from the counter-cultural scene that was prevalent in the United States during the 1970s (Naess 2005: 614). Such politically radical voices were given further credence by a host of influential scientists, who began to talk openly about global environmental concerns, such as peak oil, and resource scarcity. In the early 1970s, a succession of high-profile publications in the United States such as Paul Elrich's *The Population Bomb* (Elrich, 1968), Barry Commoner's *The Science of Survival* (which propelled Commoner onto the front cover of *Time* magazine in 1970, see Fig.5), (Commoner, 1963, 1973), and the Club of Rome's *The Limits to Growth* (Meadows et al., 1972) report, created a situation whereby environmental anxieties began to manifest in the



popular imagination. Given the sudden explosion of environmental rhetoric in North America, it is not surprising that Friends of the Earth was formed in 1969, and Greenpeace in 1972.

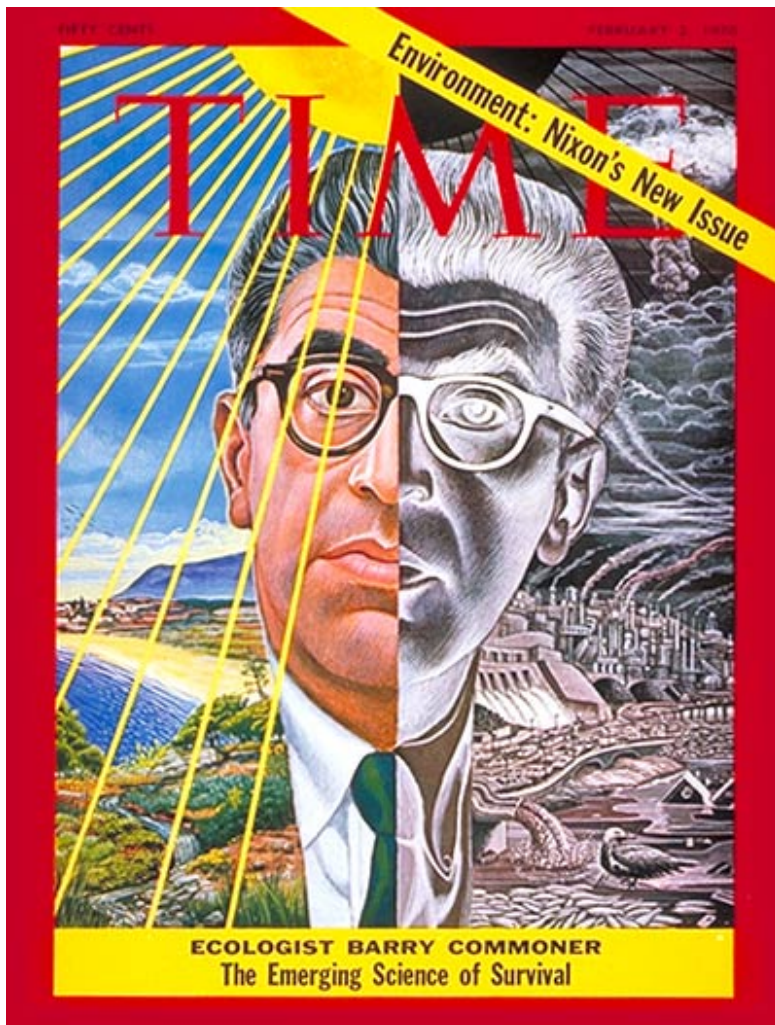


Fig. 5. Barry Commoner, Time Magazine, (Feb. 2<sup>nd</sup>, 1970)

In Europe, Ted Benton (ed. Benton, 1996) notes that the political ferment of post '68, and the popularity of new social liberationist movements (such as CND etc.) helped to ignite furious debates between Marxists and neo-Marxists on the subject of environmentalism. Hans Magnus Enzensberger's article, *A Critique of Political Ecology*, appeared in the *New Left Review* in 1974 (Enzensberger, 1996) and a year later André Gorz published *Ecologie et Politique*, though Gorz's text was not to be translated into English until 1980 (Gorz, 1980). Meanwhile in West Germany Rudolf Bahro (Weston, 1986), an influential early member of the German Green Party (founded in 1980) advocated a model of eco-socialism that was heavily influenced by the objectives of the Peace Movement.

Throughout the 1980s, intellectual debates on environmental ethics continued to gain momentum, as key texts were translated and disseminated to an ever-wider audience.

One way to understanding environmentalism is to make a distinction between environmentalism and conservationism; Arne Naess does this by differentiating between what he describes as ‘The Shallow Ecology Movement’ and ‘The Deep Ecology Movement’ (Naess, 1989: 28). For Naess, shallow ecology is conservationism, which he defines as the ‘Fight against pollution and resource depletion’ (Naess, 1989: 28) *within* the constituent framework of capitalism. According to Naess, conservationism exists to promote ‘the health and affluence of people in the developed countries’ (ibid.) through a process of ‘protecting’ specific ecosystems or habitats according to various aesthetic, commercial and/or recreational values. Thus, declaring an area like Yosemite National Park to be worthy of conservation because of its compelling rock formations, bubbling geysers and tall Redwoods, is not the same as having respect and compassion for *all* living beings.

In response to the limitations of conservationism, deep ecology is based on the ethical belief that nonhuman beings have an intrinsic ‘value’ as co-existent living entities. Naess summarises the ethical precepts of deep ecology in a series of eight points, which can be understood as Naess’s attempt at creating an ethical justification for taking into consideration the intrinsic ‘value’ of non-human life forms as co-existent entities on Earth. Naess’s eight points for the definition of Deep Ecology are:

1. The flourishing of human and nonhuman beings has value in itself. The value of nonhuman beings is independent of their usefulness to human beings.
2. Richness of kinds of living beings has value in itself.
3. Human beings have no right to reduce this richness except to satisfy vital human needs.
4. The flourishing of human life is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.
5. Current human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must be changed in view of points 1–5. These policies affect basic



economic, technological, and ideological structures. The resulting state of human affairs will be greatly different from the present.

7. The appreciation of a high quality of life will supersede that of a high standard of life.

8. Those who accept the foregoing points have an obligation to try to contribute directly to the implementation of necessary changes (Naess, 2005: 564).

Naess's concept of 'the shallow' and 'the deep' is useful to my understanding of environmentalism because Naess counterpoises environmentalism [or ecologism] against neo-liberal capitalism, which is also the position of this thesis. Although I find deep ecology's ethical precepts extremely useful as a means of defining what environmentalism is, I am sympathetic to anarchist critics such as Brian Morris who argue that deep ecology does not *directly* address social problems such as 'poverty, inequality, racism, state repression, neo-colonialism, exploitation all of which are directly linked to environmental issues' (Morris, 1997: 40) (see also Purchase, 1997). Morris's criticisms of deep ecology can be understood as being in opposition to Naess's concept of 'Ecosophy', which Naess describes as 'a personal system, a personal philosophy' (Naess, 2005: 5) that is reliant upon the concept of 'self-realisation [or] the pursuit of the "Greater self" [...] which is an active condition not a place one can reach [...] just as no one in certain Buddhist traditions ever reaches nirvana' (Naess, 2005: 8). Here Naess's allusion to Buddhism is important <sup>3</sup> because as a personal philosophical system deep ecology gravitates towards a spiritual understanding of the self, thereby moving away from the dialectical materialist tradition of Marxism or alternative anarchist political philosophies. It is this departure in deep ecology, which I find problematic.

Critics such as Graham Purchase and Brian Morris criticise deep ecology from the standpoint of an opposing environmental theory – to which I subscribe – because they are supporters of Murray Bookchin's social ecology movement. The term social ecology can be

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<sup>3</sup> For further reading on Naess and Buddhism please refer to 'Gestalt Thinking and Buddhism' (Naess, 2008: 195-207).

summarised by Bookchin's assertion that 'The imbalances man has produced in the natural world are caused by the imbalances he has produced in the social world' (Bookchin, 1986: 85). The core principle of social ecology is that ecological problems arise as a direct result of hierarchical structures of power and oppression, which form the basis of the capitalist state. It therefore follows that the phenomena of industrial pollution in contemporary society cannot be sufficiently addressed without simultaneously discussing the underlying social inequalities produced by capitalism.

When discussing environmental movements such as Bookchin's social ecology, which are necessarily in opposition to 'capitalism', it is important to define exactly what is meant by the term. Here I take as my starting point David Harvey's identification of what he describes as a 'neoliberal consensus' (Harvey, 2014:23), which arguably assumes a position of intellectual dominance in western culture with Milton Friedman's award of a Nobel Prize in 1976, and emerges as a politically dominant force with Margaret Thatcher's election victory in 1979 and Ronald Reagan's Presidency in 1981. Harvey characterises the neoliberal ethos as one in which the state withdraws from an obligation to provide 'public provision [for] housing, health care, education, transportation and public utilities (water, energy, even infrastructures) (Harvey, 2014b: 23), preferring instead to privatise these services. Furthermore, Harvey argues that at the core of neoliberal capitalism is a profound distrust of democratic populism. As an alternative, neoliberals 'tend to favour governance by experts and elites' (Harvey, 2005: 66) who administer state power in order to maintain 'a good business climate' (Harvey, 2005: 70). Harvey therefore argues that wealth creation in the neoliberal capitalist state supersedes concerns with 'collective rights (and quality of life) of labour or the capacity of the environment to regenerate itself' (ibid.).

It is important to note that this thesis was written in the years following the sub-prime mortgage crisis of 2008, the extended analysis of which forms the opening passages of Harvey's *The Enigma of Capital* (2010: 1-39). In his commentaries, Harvey states that

whilst the sub-prime mortgage crisis of 2008 was only one crash in a long succession of global crashes that have occurred since capital markets began to converge globally in the 1970s, this particular crash was ‘the mother of all crises’ (Harvey, 2010: 6). Whilst it is too early to understand the long-ranging consequences of the 2008 event, Harvey does outline some of the shifts occurring in global capitalism during the present epoch that include: the beginnings of a shift in global dominance from the USA to China due to the indebtedness of western economies, global problems associated with under consumption, long-term economic stagnation, and a widespread loss of faith in money markets (Harvey, 2010: 106-118). Arguably, the cumulative effect of such problems has resulted in a widespread disavowal of capitalism globally through street protests and uprisings, the emergence of the Occupy movement, the destabilisation of the Greek economy, and so on. The point is that capitalism is dynamically changing, and the neoliberal epoch may well be over. For the purposes of this thesis, however, the distinction of post/pre 2008 is not explicitly demarcated because I argue that the environmental problems associated with capitalism, which emerge from the late 20<sup>th</sup> century, remain undiminished by any paradigm shifts that may have recently occurred in the global structure of capitalism.

In an attempt to resist the hegemonic values of capitalism, I make the case for a form of collaborative artistic practice (see section 4:5 ‘Collaborative Working Practices’), which is commensurate with social ecology’s principles of egalitarianism, mutual aid, and communitarianism. Social ecology asserts that the concept of the nation state and regimes of representative power should be abandoned (Biehl & Bookchin, 1998: 4). In their place, Bookchin advocates a return to municipal assemblies (Biehl & Bookchin, 1998, 85) predicated upon participatory democratic equality, which is accessible to *all* political subjects (Bookchin, 1997: 1). Furthermore, in Bookchin’s concept of social ecology, the change in governance from the capitalist nation state to a society comprised of small self-organising communities is accompanied by an abolition of private property ownership and an assertion of a creative commons (Bookchin, 1986: 68). Whilst I acknowledge that the

social ecology movement is utopian in its objectives, the core values of collaboration, egalitarianism, and an overarching concern for the environment, are each at the heart of what I am trying to achieve in my artistic practice.

Moreover, this thesis uses Bookchin's concept of social ecology as a basis for a form of politicised artistic practice, which is predicated upon a belief in autonomous action and universal democratic participation. In order to institute revolutionary praxis, Bookchin is typical of left-libertarians more generally in advocating the use of direct action as a revolutionary strategy, which can be used to 'assert the identity of the particular within the framework of the general' (Bookchin, 1986: 23). In the face of propaganda from the media, educational institutions, and other apparatuses of the state, Bookchin argues that individual personalities have been largely 'effaced' (Biehl & Bookchin, 1998: 139) with personal identity being tethered to the demands of the capitalist economy; an observation which leads Bookchin to claim that in a capitalist society 'there can be no fulfilled self' (Bookchin, 1986: 67). Taking Bookchin's argument into consideration, I argue in this thesis that the production and dissemination of art has a role to play in re-asserting individual subjectivity, in opposition to privations capitalism imposes upon the self.

One of the challenges in this thesis was to argue that a political theory such as social ecology, which does not directly address problems inherent in art, could justifiably be described as a quality of my artistic practice. In an attempt to overcome this problem the work of Todd May was influential. Todd May argues that post-structuralism should be regarded as a contemporary form of anarchism, not only because post-structuralist theory rejects both neoliberalism and Marxism as viable models for a future society, but also because post-structuralism's emphasis on 'decentralization, local action, [and] discovering power in its various networks rather than in the state alone' (May, 2010: 29) can also be regarded as anarchist concepts. It is important to acknowledge, however, that May's claims for equating poststructuralism with anarchism are contentious. As Süreyya Evren

observes, May disregards key poststructuralist thinkers such as Derrida, Baudrillard and Lacan because they do not fit into his conceptual schemata of anarchist politics (Evren, 2011: 9). Instead, May makes a case for a form of poststructuralism based upon the writings of Lyotard, Deleuze and Foucault, who are more overtly political in their attempts to deconstruct heterogeneous and immanent structures of power (ibid.).

Lewis Call argues that Todd May's particular interpretation of post-structuralism as an emergent form of anarchism – or 'post-anarchism' as it has become known – represents an attempt to incorporate developments emerging from Situationism, and the post-structuralist tradition from 1968 onwards, 'in order to reinvigorate anarchism from within' (Call, 2011: 183). Importantly, Call emphasises that this development was not intended to 'dismiss the classical anarchist tradition; rather, post-anarchism attempts to radicalize the possibilities of that tradition' (Call, 2011: 183) in an attempt to better situate anarchism into a contemporary cultural context. As Jason Adams points out, one such example were the protests that occurred in Seattle surrounding the World Trade Organisation's Ministerial Conference (N30) in 1999. Adams remarks that the protests represented a 'turning point' (Adams, 2011: 117-37) for many autonomous groups concerned with ecological politics, class struggle, gender equality and so on. Adams's point is that Seattle N30 had the effect of unifying these disparate factions in the common struggle against what Harvey would refer to as the 'neoliberal consensus' (Harvey, 2014: 23) governments of the capitalist state. Seattle N30 was to have a profound influence on anarchist thinkers such as Todd May, who drew parallels between post-anarchism and contemporary activism by arguing that post-structuralist theory and forms of praxis were mutually concerned with 'irreducible struggles, local politics and alliances, an ethical orientation [and] a resistance to essentialist thinking' (May, 2004, cited in Evren, 2011: 4-5).

Todd May's post-anarchist approach allows for comparison to be made between social ecology as a political theory and contemporary debates on-going in post-

structuralism, which reference aesthetics and the production of contemporary art. Central to this comparison is Todd May's (2010) assertion that the theories of Jacques Rancière can be interpreted from a post-anarchist standpoint. Rancière's theories concerning the reciprocity that exists between, 'the aesthetics of politics [and] the politics of aesthetics' (Rancière, 2004: 25) provides the basis for my claims to a photographic practice that can also function as a form of 'political' praxis. The basis of Rancière's argument is that 'art and politics do not constitute two permanent, separate realities' (Rancière, 2004: 25), but instead represent diverse yet mutually constitutive expressions of democratic subjectivity, enacted within the social sphere. At the heart of Rancière's argument is the assertion that aesthetics and politics are, 'linked, beneath themselves, as forms of presence of singular bodies in a specific space and time' (Rancière, 2004: 26). Given some of the similarities between aesthetics and politics, Rancière argues that it is 'more valid to see [...] the plurality of ways in which they are linked' (Rancière, 2004: 46) rather than to meditate upon their essential differences.

Using Rancière's claims for the reciprocity that exists between aesthetics and politics, this thesis aims to make a claim for a photographic practice, which has the potential to function as a form of 'politics', as Rancière would define the term (see section 4:2 'Aesthetics as Politics'). For Rancière, 'politics' consists of reconfiguring the normative distributions of power within society by introducing into the cultural sphere 'new subjects and objects, [in order] to render visible what had not been' (Rancière, 2004: 25). This process is referred to by Rancière as '*dissensus*' (Rancière, 2010: 139) and in his conceptions of the 'politics of aesthetics' (Rancière, 2004: 25) Rancière makes a case for the capacity of art to function as a dissensual medium capable of opposing the 'neoliberal consensus' (Harvey, 2014: 23) of the capitalist state. For Rancière, *consensus* represents 'the "end of politics" [...] not the accomplishment of politics but simply a return to the normal state of things – the non-existence of politics' (Rancière, 2010: 42-3). This is to say that for Rancière, '[neoliberal] capitalism entails the extinction of politics' (Id.: 43).

## Aesthetics

My discussion concerning aesthetic qualities such as ‘beauty’ and the ‘sublime’ proceeds in the first instance from an understanding of Immanuel Kant’s *Critique of the Power of Judgment* (Kant, 2000), which was first published in 1790. Whilst Kant’s interest lay more in the beauty of the natural world, as opposed to representations in art, interpretations of Kant began to shift during the nineteenth century when aesthetics became identified with the philosophy of art. It is important to concede, however, that Kant’s Third Critique is beset with contradictions and complexities, which ensure the philosopher remains highly contentious; for this reason, my understanding of Kant has been informed by a close reading of Gary Banham (2000), Paul Crowther (1996) and Paul Guyer (2005).

Kant’s concept of beauty is complex because whilst ‘free beauty’ (Kant, 2000: 103) exists only in nature and ‘dependent beauty’ in culture, i.e. art, beauty can only ever be the product of the human mind that perceives it. The judgement of beauty is therefore a logically conditioned ‘judgement of taste’ (Kant, 2000: 107-8). For Kant, the expression of taste is proof of our inherent capacity to exercise ‘exemplary’ (Kant, 2000: 116-20) determinations over the world that surrounds us. Thus, Kant argues that the ‘*human being alone* [my emphasis]’ (Id.: 117) is capable of perceiving the ideal forms of beauty. Using Kant’s aesthetic of judgement to discuss art from an environmental perspective is potentially problematic because Kant can be accused of fostering speciesism with his claims concerning humanity’s unique capacity to exert the power of reason over ‘nature’.

In defence of Kant, the extent to which any human action can ever be considered to be truly egalitarian with other species is also a hotly contested topic in contemporary environmental ethics (see Arne Naess’s comments on egalitarianism: Naess, 2005: 547-50). From a social ecology perspective, Murray Bookchin offers one solution to the charge that Kant’s concept of reason is anthropocentric, when he comments:

[...] human beings are *literally* constituted by evolution [...] their presence in the world of life marks a crucial change in evolution's direction from one that is largely adaptive, to one that is, potentially creative and moral' (Bookchin, 1989: 72).

Post-Darwin, it is possible to argue that whilst human beings have an extraordinary capacity to exercise reason, this ability is in itself an embodiment of natural evolution at work, as Bookchin suggests.

It is significant that throughout this thesis I have not referred to the term 'nature' when referring to the environment. My decision to regard the term 'nature' as extremely problematic was informed in the first instance by Arnold Berleant's assertion that 'Nature alone is [...] a fiction; even in its wildest places, nature is always culture' (Berleant, 1997: 61) and was given further credence by Timothy Morton's (2007, 2011, 2012) assertion that 'In order to activate ecological awareness fully, we must drop the concept Nature' (Morton, 2012) as a separate entity from culture. Taking Morton and Berleant's reservations into consideration, throughout the course of this thesis I have sought to signal my suspicion with the term 'nature' by referring instead to 'the natural world'. I am aware that this slight alteration in language is insufficient when it comes to explicating myself from the ontological problems associated with the term 'nature'. In my defence, I encountered in my commentaries the cultural limitations of common language usage, and I could not find a suitable alternative to 'nature' that did not obscure my text unnecessarily and exacerbate the situation further.

In the closing decades of the twentieth century, the growing cultural importance of environmental issues began to attract a variety of scholars, most notably Allen Carlson (2011) (Carlson & Berleant, 2004) and Arnold Berleant (1991, 1997, 2002, 2005,) who recognised the distinctive contribution that aesthetics could make to environmental philosophy. Prior to the emergence of environmental aesthetics as a field of study, aesthetics was largely concerned with philosophy of art. The field of environmental aesthetics was developed as a reaction to this emphasis, pursuing instead an investigation



of the environment beyond the confines of art, which includes phenomena such as the built environment or the aesthetics of everyday life as described by Yuriko Saito (2007).

In my writings on aesthetics, I chose to pursue a Kantian argument at the expense of environmental aesthetics for two important reasons. Firstly, in my commentaries on photographs of industrial pollution I *am* principally concerned with aesthetic representations in art. Furthermore, in the choice of my subject matter – specifically environments that have suffered the affects of industrial pollution – I felt that Arnold Berleant’s literature on the subject of ‘aesthetic harm’ (Berleant, 1997: 63-77) did not sufficiently acknowledge that even the most polluted spaces have the capacity to exhibit ‘positive’ aesthetic characteristics, such as beauty. In the literature of environmental aesthetics, and even in Yuriko Saito’s (2007) writings on mundane landscapes and the banal, I struggled to find commentaries on the aesthetic appearance of extreme environments, which have become poisonous and eco-toxic – the only exception was literature concerning the sublime, which I shall discuss momentarily. For this reason, I made the decision to base my aesthetic analysis around Kant’s notion of beauty as a pure aesthetic judgment, which is ‘disinterested’ (Crowther, 1996: 110-8) and immanent.

In my use of Kant’s aesthetics, it is important to acknowledge the criticisms levelled against Kant’s notion of aesthetics by Marxist theorists such as Terry Eagleton (1989), Pierre Bourdieu (1984) and György Lukács (1971), who variously criticise Kant’s concept of the aesthetic judgement of taste as being indicative of hegemonic bourgeois ideological values acting upon the political subject. At the core of Eagleton’s argument, for example, is the suspicion that Kant’s concept of the aesthetic can be used to condition subjects into forming opinions that are not really their own – what Eagleton describes as ‘the compelling logic of a global decree’ (Eagleton, 1989: 95). However, in recent years a number of theorists have attempted to reclaim Kant’s ‘red’ credentials. Kaufman (2000) provides an early example of a return to the aesthetic in contemporary theory, and more recently Mike

Wayne (2012, 2014) has made a convincing case for the aesthetic as a form of highly individualised experience, which has the possibility of liberating the political subject from what Wayne describes as ‘the widespread phenomenon of disavowal in consumer capitalism [which] depends on the separation of sensuous experience from knowing’ (Wayne, 2012: 394). For Wayne the ‘free play’ of imagination and understanding implicit in the aesthetic encounter, whilst undeniably susceptible to hegemonic values, can also privilege forms of individualised sensory experience, which have the capacity to reify individuals from the values promulgated by capitalism.

In my discussions on photographs of industrial pollution, I make a distinction between the aesthetic characteristics of beauty, as located in the art object and in the environment, and what I describe as the ‘ugly subject matter’ of industrial pollution. Of great assistance in my argument is Mark Cousins’ essay ‘The Ugly’ (2009), which takes Mary Douglas’s concept of dirt as ‘matter out of place’ (Douglas, 2002: 36) as a starting point for a discussion on the spatial power of dirt or dirtiness as the ugly subject matter of the photographs I examine. In my discussion on ugliness, I chose to stay with Cousins’ Kantian approach in preference over theorists such as Alexander Nehamas (2001, 2007) and Andrei Pop (2014), who both argue that beauty and ugliness are aesthetic qualities which are relativistic in nature, and can be found simultaneously within a singular object (Pop, 2014: 165-180). Here Nehamas and Pop draw upon Platonic notions of beauty and ugliness as comparative qualities, which run contrary to Kant’s idealised concept of beauty, in which a beautiful object can *only* be beautiful to behold.

In the second book of the *Analytic of the Sublime* (Kant, 2000: 128-48), Kant distinguishes two notions of the sublime: the mathematically sublime and the dynamically sublime. In both cases, the experience of the sublime ultimately consists of a feeling inspired by the superiority of our own power of reason, which is described as a super-sensible faculty capable of transcending nature (Kant, 2000, 144-5). In both instances of

the sublime, the human imagination fails at comprehension when confronted with something that is so large it overwhelms the imagination's capacity for measurement and understanding, in such a situation the imagination strives to comprehend the object in accordance with reason but fails to adequately do so (ibid.).

In contrast, contemporary notions of the sublime are not predicated upon super-sensible concepts like the Kantian sublime. In his study of the phenomenon, David Nye (1994) argues that man-made structures such as the Golden Gate Bridge acquired the status of 'sublime' objects (Nye, 1994: xi) in US culture because they promoted social cohesion and a sense of national identity in the aftermath of the US Civil War. The technological sublime is therefore a product of USA culture, and is subject to alterations in the values of that culture (Nye, 1994: xii). This observation leads Nye to conclude that the technological sublime is a 'social construction [not] a precious encounter with reality' (Nye, 1994: xiv). Moreover, a number of contemporary critics have coined their own version of the sublime: 'the hygienic sublime' (Stormer, 2004), 'the toxic sublime' (Peeples, 2012), 'the corporate sublime' (Marien, 1993); whilst the phrase 'industrial sublime' (Burtynsky, cited in Campbell, 2008: 43) is used by Burtynsky (2003) to define his own practice, although the artist offers no philosophical justification for the term.

In my commentaries concerning the sublime in this thesis, it should be understood that I am suspicious of any reading of the sublime, which is culturally specific to 20<sup>th</sup> century US notions of 'sublimity', as espoused by commentators such as Nye. From a European perspective, I prefer to identify with Kant's reading of the concept of the sublime as a phenomenon that is super-sensible to behold. Whilst the Golden Gate Bridge may be a colossal and an admirable object, it is clearly not beyond the capacity of the senses to comprehend, and as such, I reject Nye's American interpretation of the object as 'sublime'. I am aware, however, that my opinion is subjective and open to interpretation.

## Chapter Synopsis

Chapter 1 examines how the values of capitalism are connoted through Carleton Watkins' use of the 'sublime' in his photographs of a Californian hydraulic gold mine, run by a company known as the North Bloomfield Mining and Gravel Company in the latter half of the 19<sup>th</sup> century. This mining operation is of interest because Watkins was hired to produce advertising images on behalf of the company. Unfortunately, the technology of hydraulic mining had severe repercussions for the environment, and this particular mining operation is significant because of the excessive damage which the mining operation caused to the outlying region. Drawing a parallel between the work of Edward Burtynsky and Carleton Watkins, I ask if the 'sublime' can be considered antithetical to the ethics of environmentalism.

In this initial chapter, I also discuss the work of two lesser known photographers, J.A. Todd, and 'Clinch', whose aesthetic approach to the documentation of the North Bloomfield Mining and Gravel Company differs from that of Watkins. Significantly, both photographers were hired for the purposes of documenting the environmental damage caused by the North Bloomfield operation, in order to prosecute the mining company for industrial pollution. I argue that the photographs of J.A. Todd and 'Clinch' mark the beginnings of environmentalism as a social movement in the USA, which from the outset was bound-up with the use of photography as a form of visual testimony.

In Chapter 2, I jump forward in time to the end of the 20<sup>th</sup> century, I examine how the photographic artist can apply his/her skills as a visual communicator, in order to help activists in their bid to halt pollution and initiate remedial strategies. In particular, I analyse Richard Misrach's publication *Bravo 20, The Bombing of the American West* (1990), citing the project as an example of environmental activism conducted through the aesthetic medium of photography. It is significant that *Bravo 20* was disseminated primarily in the form of a photobook, and that the project was a collaborative effort by a

number of different authors, utilising their skills for a common purpose. Citing *Bravo 20* as an example of environmentalism in photography, I compare Misrach's publication against Ansel Adams' pictorial images, which are emblematic of conservationism as preservationism. I then proceed to discuss the boundaries that lie between a politicised form of artistic practice and the production of propaganda. In my commentaries on Misrach's *Bravo 20*, I use Barthes' concept of anchor and relay' (Barthes, 1977: 32-51) in order to consider if the photograph *alone* is capable of communicating a cogent environmentalist meaning.

Chapter 3 represents the first opportunity to evaluate my practice within the context of the photographers previously discussed in the opening two chapters. I begin by addressing the role that beauty plays in the photographs of industrial pollution. In my evaluations, I make a distinction between Kant's notion of beauty as a 'disinterested' (Kant, 2000: 91) quality of an image, and what I define as the 'ugly subject matter' of industrial pollution, in order to argue that a photograph created for the purposes of protesting against environmental despoliation can ethically exhibit the quality of beauty. My argument then proceeds to make a claim for a model of photographic practice that represents a counter-aesthetic strategy to Burtynsky's industrial sublime. In order to support my argument, I identify two visual strategies in my work, which I claim oppose the characteristics of the sublime:

- (1) [Whenever possible] to construct photographs of pollution based on an immediate and first-hand interaction with the topography, which I refer to as 'the activist's perspective'.
- (2) To inform the audience of the environmental problems associated with a given location by anchoring the image within a multimodal framework of texts, which has the advantage of situating the photograph within a localised, historical and ecological context.

Having outlined my claim for a form of artistic practice that is commensurate with the ethical values of environmentalism, I discuss various examples from my photobooks and draw a comparison of my practice to a number of contemporary European photographers.

In chapter 4, my claims for a politicised artistic practice are contextualised within a post-anarchist theoretical framework, which draws heavily upon the writings of Jacques Rancière. In citing the theories of Rancière, I argue that art [aesthetics] and politics do not constitute two separate aspects of culture, but instead represent diverse yet mutually constitutive expressions of democratic subjectivity enacted within the social sphere. Using Rancière's conceptualisation of the 'politics of aesthetics' (Rancière, 2004: 25), I argue that the mimetic act of constructing art objects and disseminating them can be considered as a form of participatory politics, which is capable of espousing the environmental ethics of Murray Bookchin's social ecology movement.

Drawing upon evaluations of the three photobooks produced during my research, I claim that the photobook has the potential to engage a diverse audience – government representatives, legal practitioners, scientists, environmental activists etc. – and effect change in the subjectivity of those persons, in order to promulgate the case for remediation of polluted spaces. As part of an extended description of my working methods, I also discuss the importance of collaborative working practices and my formation of the artist collective Environmental Resistance. The opportunity to appraise how my working methods evolved throughout the course of my research additionally allows for the opportunity to discuss the importance of environmental science in my practice. The thesis ends by situating my artistic practice simultaneously between the domains of environmental science and environmental activism.

## Chapter 1: Photographs of Industrial Pollution: Ethical Problems

### 1:1 Introduction

This chapter begins by profiling a trio of photographers who variously documented the North Bloomfield Mining and Gravel Company, which operated in California, from 1866 to circa 1884. My historic analysis represents an attempt to retrospectively identify the ethical implications arising from differing approaches in the documentation of hydraulic gold mining and large-scale industrial pollution in late 19<sup>th</sup> century US culture. The history of the North Bloomfield mine is interesting for a variety of reasons. Notably, the company twice (1871 & 1879-81) commissioned the photographer Carleton Watkins to photograph their works, in an effort to raise investment capital.

The photographs Watkins made at the Malakoff Diggins pit exemplify a model of commercial photographic practice, which as Christine Hult-Lewis argues (Hult-Lewis, 2011a: 164), succeeds in collapsing the boundaries between art and advertising, in a bid to encourage further investment in the North Bloomfield mining enterprise. Watkins' singular aesthetic approach to the subject matter of mining, which incorporates elements of 'the sublime', is important to consider because of the influence that the photographer has exerted upon successive artists throughout the 20<sup>th</sup> century and into the present era – Edward Burtynsky is a prime example of a contemporary photographer who has been influenced by Watkins. In this chapter, I therefore question if Watkins' approach to photographing mines can be considered, from a contemporary environmentalist standpoint, to be commensurate with the desire to raise awareness of environmental problems using the medium of photography. Furthermore, in my appraisal of Robert Adams' text *Photographing Evil* (1996), I also question the on-going complicity of photographers with industrial capitalism.

In contrast to Watkins' particular approach to photographing the industrial transformation of the topography, two additional photographers were also involved in documenting the North Bloomfield Mining and Gravel Company's operation. In the first environmental court case in US legal history, farmers who had their land flooded and despoiled as a result of the hydraulic mining techniques employed at the mine, successfully prosecuted the mining company in a collective civil action, effectively banning the technique of hydraulic mining in California overnight. One key aspect of the *Edward Woodruff vs. North Bloomfield* [1884] trial (US National Archives, 2014a) was the photographic evidence supplied by a photographer known as J.A. Todd. Todd's contribution demonstrates that the photograph as a form of visual evidence played a key role in the emergence of a proto-environmental protest movement in the USA. I therefore claim that the origins of environmental protest in US photography can be traced back to J.A. Todd and the *Edward Woodruff vs. North Bloomfield* [1884] trial.

The third photographer of the trio is unknown, and can only be identified by a stamp on the album that the photographs are mounted in, which reads the name 'Clinch' (see Appendix i). Whilst details concerning the identity and motivations of the 'Clinch' photographs remain obscure, these images form the basis of a secondary trial, the *US vs. North Bloomfield Mining Company* [1899] (US National Archives, 2014b) which saw the State of California pursue The North Bloomfield Mining and Gravel Company for reparations in the aftermath of the Sawyer Verdict [1884] (US National Archives, 2014a). As a counter-aesthetic to Watkins' sublime, and also to J.A. Todd's pictorial approach to documenting industrial pollution, the Clinch' photographs anticipate the reductivist and 'amateurish' qualities of the conceptual artists in the 1960s and they typify a moment in the evolution of photography when technological innovations were taking the process of making photographs out of the hands of a professional elite and into the realms of popular culture.



## 1:2 Visualising Capital at Work: Carleton Watkins' Malakoff Diggins Series

In the most recent and comprehensive publication of Watkins' large-format work, *Carleton Watkins: The Complete Mammoth<sup>4</sup> Photographs* (Hult-Lewis, 2011b: 1), Christine Hult-Lewis describes how Carleton Watkins 'arrived in California in 1851, on the heels of the first rush of forty-niners' (Hult-Lewis, 2011b: 1) at the outset of the Gold Rush. Whilst it is not known if Watkins had ever worked as a miner before he began his career as a photographer – he had no training in photography prior to travelling west – it is striking that the early part of Watkins' career was indebted to four significant commissions, each from mining companies<sup>5</sup>. From the outset, Watkins' career depended upon patronage from an elite coterie of wealthy capitalists who owned various mining claims in California, leading Hult-Lewis to describe Watkins as 'one of the very first corporate photographers' (Hult-Lewis, 2011a: 23). Hult-Lewis' description is important, because it emphasises the relationship between Watkins' signature aesthetic approach to photography, and the ethical imperatives of capitalism, which underpin his photographic practice.

Whilst Watkins' views on mining are not known<sup>6</sup>, it must be remembered that at this time, scientific and social awareness concerning the importance of ecological systems was largely unknown. Viewed from a 21<sup>st</sup> century cultural perspective, imbued with deep-seated environmental anxieties, it is possible to reinterpret Watkins' mining photographs from an environmentalist perspective. Given such cultural differences between Watkins' era and the present, it is important not to foster an impression of Watkins as a cynical

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<sup>4</sup> The mammoth photographic plate 'is defined as one made with a camera that exposes collodion negatives approximately 45.7 x 55.9cm (18 x 22 in.) in size, the majority of which date from 1861 to 1891' (Naef 2011: xx).

<sup>5</sup> The first of which, a commission for the Guadalupe quicksilver mine in 1858, constituted 'Watkins' first opportunity to present himself as a photographer' (Hult-Lewis, 2011b: 1); when Watkins was asked to provide 'photographic evidence' (ibid.) for a land dispute between the *U.S. vs Fossat* concerning the boundaries of the mine Hult-Lewis remarks that, 'This was one of the first times that photographic evidence was used for this purpose' (Hult-Lewis, 2011b: 1). A further three commissions mark the establishment of Watkins as a photographer; one commission was undertaken for the purpose of raising investment to fuel expansion of the works relating to the Las Mariosas mining estate, 1859-60, and the remaining two were also undertaken in order to provide legal evidence relating to property disputes concerning the Rancho San Antonio land grant 1861, & the New Almaden quicksilver mine, 1863 (Hult-Lewis, 2011b: 1).

<sup>6</sup> Watkins' possessions were destroyed by fire in the San Francisco earthquake of 1906 (Hult-Lewis 2011a: 3).

profiteer without care for the environment. However, it is equally important to stress the extent of Watkins' complicity with the industrial capitalism, specifically with regards to the new technology of hydraulic mining, which 'completely transformed the land, killing any living thing in its path and creating new earthen forms' (Hult-Lewis, 2011a: 168). Watkins' photographs therefore raise interesting questions concerning the ethics of photographing similar industrial operations in the contemporary era. Furthermore, it can also be argued that Watkins' continuing influence on contemporary practitioners is due in no small part to his inordinate capacity to create images which functioned in the interests of his industrial employers, whilst simultaneously transcending their commercial imperative to become 'beautiful images worthy of exhibition' (Hult-Lewis, 2011a: 164); it is precisely this ambiguity which makes Watkins' work so fascinating to discuss.

The photographs Watkins produced on behalf of the North Bloomfield Mining and Gravel Company<sup>7</sup> show a variety of perspectives from within a great open cast pit, which was known as the Malakoff Diggins pit. The majority of the images from Watkins' Malakoff Diggins series exhibit a predictably located horizon-line within the frame. Throughout the progression of the series, Watkins circles the perimeter of the mine, photographing in multiple directions before entering the floor of the pit, in order to move closer to the pressure pipes and the hydraulicing process<sup>8</sup>. Conscious that his audience partly comprised potential investors in the North Bloomfield Mining and Gravel Company, as well as technical specialists such as geologists and engineers, Watkins accompanies

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<sup>7</sup> Watkins was commissioned to document the works 'in 1871 and again in 1878' (Hult-Lewis, 2011a: 153), creating some 'seventy mammoth photographs and roughly fifty stereographs' (Hult-Lewis, 2011a: 154) with the express purpose of acquiring further capital investment within America and also significantly from the UK.

<sup>8</sup> Christine Hult-Lewis explains succinctly what hydraulic mining entailed when she writes:

Hydraulic mining relies on the force of water to dislodge auriferous (gold-bearing) rocks from hillsides using reinforced hoses called "monitors." The water comes from distant mountain reservoirs, higher in elevation than the mines themselves, through a series of ditches and flumes. The water is collected in smaller catchments at the mines; pressure pipes then convey water to the monitors, which are then aimed at the rock face. The high pressure of the monitors renders the hillside into muddy gravel (also called "tailings" or "slickens"), some of which contains gold. Once the monitors have reduced the rock to tailings the gold must then be separated from them, which is accomplished by directing the tailings sluice boxes and riffles. The rock is then treated with quicksilver (mercury) to separate the gold from the surrounding rock. (Hult-Lewis, 2011a: 159-60)

some of his photographs with captions detailing the direction of the camera in relation to the compass (Fig. 6). Another feature of Watkins' Malakoff Diggins photographs is the consistent use of a raised ocular perspective, which allows potential investors to survey the mining works through the 'panoptic vision' (Wallach, 1993, cited in Hult-Lewis, 2011a: 206) of a floating disembodied eye. This perspectival viewpoint, which the geographer Denis Cosgrove (2003) describes as the 'Apollonian' gaze, affirms the acquisitive dominance of capitalism's territorial ambitions by emphasising a sense of observational privilege over the reconnoitred topography.



Fig. 6. Carleton Watkins, 1083: *Malakoff Diggins, Looking Northeast, near North Bloomfield, Nevada County* (1871)

At the bottom of the open cast pit (Fig.7), Watkins again manages to elevate the camera, so that individual miners appear as inconsequential when compared to the vast flumes of water that spurt some '76 metres high' (Hult-Lewis, 2011c: 461). In photograph '1083: Malakoff Diggins, Looking Northeast, near North Bloomfield, Nevada County (1871)' (Fig. 6) we find Watkins perched high on the ridge of the Malakoff Diggins pit. This north-

eastern view of Malakoff Diggings is flanked by the forest canopy, which frames the uppermost ridge of the composition, except for a thin strip of land that extends into the middle of the pit from the left side of the image. In some of the later photographs from 1879-81 (Fig. 7), the presence of the forest recedes or is totally absent, creating the illusion of an ‘otherworldly’ (Hult-Lewis, 2011a: 218) lunar surface, which must have provoked feelings of awe in Watkins’ contemporary audience. It is precisely the power of the spectacle of environmental destruction, which allows for a description of Watkins’ work as being ‘sublime’.



Fig. 7. Carleton Watkins, 1092: *Malakoff Diggings, near North Bloomfield, Nevada County* (1879-81)

In 1871, the mine’s intrusion into the forested environs was still on-going, and the Malakoff Diggings pit is documented by Watkins as an intrusion into the greater expanse of the forested canopy on the mountainside. Watkins utilises this dichotomy by emphasising the dynamic tension existent between the dark tones of the forest canopy and the creamy-white highlights of exposed rock, which occupy the important middle-ground of the

composition. The subjugation of the natural elements in the photograph is further accentuated by the lattice of sluice boxes and canals, which appear as violent incisions upon the topography whilst simultaneously functioning as a compositional aid, allowing the viewer to navigate through the floor of the mine towards the back-drop of the image. In the middle-ground of the photograph, a promontory of land notable for the presence of a large solitary dead tree further signifies the despoliation of the forest ecosystem. Capitalism's 'ceaseless quest to dominate nature' (Harvey, 2010: 157) is explicit in the case of the North Bloomfield mine. For the engineers involved in hydraulic mining, the flora and fauna were considered to be nothing more than an 'overburden' (EPA, 2013), which must be swept away in order to reach the valuable minerals located in the bedrock below.

Watkins' role as a photographer documenting the North Bloomfield mining works was just one facet of a highly complex capitalist operation. The 'state-finance nexus' (Harvey, 2010: 48) that developed in order to organise an operation on this scale required an astonishing amount of coordination. The immense need for water to power the hydraulic hoses necessitated the creation of numerous water providers<sup>9</sup> not to mention the host of timber companies, steam engineers, logistics operatives and additional service providers, which were required to keep the mine up and running. Such technological infrastructure at North Bloomfield necessitated tremendous capital outlay, the company 'absorbed some 3.5 million dollars in investments' (Hult-Lewis, 2011a: 154) before it produced any significant amount of gold.

Given the financial outlay necessary for the North Bloomfield operation, the mine provides a classic example of what David Harvey refers to as capitalism's 'creative destruction on land' (Harvey, 2010: 184), which is indicative of capital's propensity to transform the natural world in the quest for new revenue streams. In his description of this

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<sup>9</sup> The host of water companies included 'the South Yuba Canal Company, the Excelsior, the California Water Company, the Eureka Lake and Yuba Canal Company. These and other companies built 5,276 miles of flumes, canals and ditches [in order to] to supply water to the miners' (Project Underground, 2012).

process of alteration, Harvey provides a neat summation in a passage that could easily have been written specifically in reference to the North Bloomfield mining operation when he comments:

Capitalists and their agents engage in the production of second nature, the active production of its geography, in the same way as they produce everything else: as a speculative venture, more often than not with the connivance and complicity, if not collaboration of the state apparatus (Harvey, 2010: 184).

Harvey's observations serve to illustrate that the sense of awe conveyed by Watkins' Malakoff Diggins photographs partly derives from the audacity and organisational capacity of capitalism to converge upon the natural world by redirecting rivers, bringing together technological advances, labour power, logistics and investment. In the case of the hydraulic mining technology at Malakoff Diggins, the power of capital converges and is concentrated within the circumference of a hydraulic hose, which is aimed at the bedrock in order to dislodge the most totemic of all metals – gold.

### **1:3 J.A. Todd's Testimony, The Photograph as Evidence**

If Watkins' Malakoff Diggins series represents the untrammelled power of capital to quite literally move mountains in the pursuit of profit, then it is logical to consider where the excess bedrock and silt, which constituted the great majority of the terrain, ended up. Hult-Lewis comments (Hult-Lewis, 2011a: 218) that the dams pictured by Watkins, despite their size and strength, were never strong enough to contain the vast volume of sludge produced as a natural consequence of the hydraulic mining process. Predictably, the North Bloomfield mining operations caused sediment to cascade onto lower ground, killing marine life and flooding the towns of Marysville and Yuba City (California State Parks, 2009). So severe were the floods in 1875, that 'Over 1 billion cubic yards of debris raised the bottom parts of San Francisco Bay by as much as 3 feet. The bed of the Sacramento River

rose by 16 feet, impeding navigation and causing millions of dollars in damage to California's Central Valley farms' (ibid.). The situation in the Central Valley was untenable, and it resulted in a number of farmers forming the 'Anti-Debris Association [on] August 24, 1878' (Project Underground, 2012), with the aim of instigating a series of lawsuits, in an attempt to halt the process of hydraulic mining.

Throughout the 1870s, the Anti-Debris Association failed in their attempts to shut down the mining operations; however, their efforts were rewarded with the successful *Woodruff vs. North Bloomfield* [1884] legal case, which ensured that the North Bloomfield mining operation ceased production with almost immediate effect. Almost certainly the case constituted 'the first major environmental decision' (Project Underground, 2012) in the legal history of the USA. Watkins' North Bloomfield images, especially the second series of 1879-81, which saw the photographer return to the area after the flooding caused by the mining operation in 1875. Watkins' photographs must be understood within the historical context of the on-going legal battle that was being mounted by the Anti-Debris Association at the time. It is significant that Watkins' second expedition of 1879-81 contains no evidence that Watkins photographed any of the pollution down-stream from the Malakoff Diggins pit, suggesting that Watkins was not employed, or did not concern himself with, documenting the environmental impact of hydraulicing on the surrounding ecosystem.

In the case of *Edward Woodruff vs. North Bloomfield* [1884], photography played a crucial role in the legal proceedings, though ironically this was one court case in which Watkins' photographs or testimony were not required in order to defend the interests of his patrons<sup>10</sup>. In opposition, the plaintiffs utilised the power of photographic evidence by

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<sup>10</sup> The case itself was complex and long-drawn out with proceedings occurring, 'over several years with 200 witnesses and 200,000 pages of testimony in all' (Hult-Lewis, 2011a: 221). Given the considerable duration of the court proceedings, it is interesting to learn that the North Bloomfield legal team did not make use of Watkins' images. This suggests that whilst Watkins' photographs were capable of functioning as advertisements on behalf of the mining industry, they added no advantage to a legal case that sought to underplay the environmental impact of the dam on the surrounding area.

hiring the lesser-known photographer J.A. Todd<sup>11</sup> to document the extent of the debris and flooding downstream from the North Bloomfield works. The scope of environmental damage visited upon the communities downstream from the mine cannot be underestimated; Christine Hult-Lewis comments that ‘some 60 miles southwest of Marysville and beyond [...] orchards [were] unrecognizable as such, covered in water, silt and sand’ (Hult-Lewis, 2011a: 222). It is therefore important to realise that what J.A. Todd was commissioned to document was a significant man-made disaster.

If Watkins pioneered the use of photography as a form of ‘evidence’ (Marien, 1993: 4) in order to settle land-litigation disputes between rival industrialists, then the work of J.A. Todd pioneered the use of photography in order to implicate the very same industrialists of causing pollution to the environment<sup>12</sup>. In his first series of prints taken late in 1882, Todd documented various swollen and breeched dams that enabled the Woodruff legal team to establish that the North Bloomfield dams were prone to failure, and insufficiently constructed. On the second expedition, which occurred after the collapse ‘of North Bloomfield’s English Dam in [the] June of 1883’ (Attorney for the plaintiffs, Cadwalader, cited in Hult-Lewis, 2011a: 221), Todd responded to the disaster by photographing the extent of the flooding as far afield as ‘60 miles southwest in Marysville and beyond’ (Ibid.). The resulting devastation can be observed in Todd’s image (Fig. 8) *View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr. Briggs and Mr. Riggs (1883)*.

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<sup>11</sup> Hult-Lewis comments that Todd provided the plaintiffs with seventeen photographs over the course of two years, from expeditions conducted in December 1882 and September 1883 (Hult-Lewis, 2011a: 221). These seventeen images are currently preserved in the archive of the California Historical Society (CHS), San Francisco. At the time of writing, they have not been digitised and can only be viewed by visiting the archive in person – a fact confirmed by personal correspondence with Hult-Lewis. Hult-Lewis has provided me with an overview of the series and kindly supplied a digital copy of Fig. 10, which she included as part of her thesis. Accordingly, I am unable to fully appreciate the range of Todd’s photographic contribution to the *Edward Woodruff vs. North Bloomfield* [1884] trial.

<sup>12</sup> Justice Sawyer’s ruling, which outlawed hydraulic mining in the State of California. Becoming law on the 7<sup>th</sup> January 1884 (US National Archives, 2014a), Sawyer’s verdict in favour of the plaintiffs effectively ended the Gold Rush in California. Unfortunately, the statutory limitation imposed by Sawyer was easily circumvented by the mining capitalists, who simply relocated the technology of hydraulic mining to the remote and relatively pristine territories of Alaska and the Yukon in Canada (Project Underground, 2012); where the interests of agrarian communities downstream was not a determining factor.





Fig. 8. J.A. Todd, *View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr Briggs and Mr Riggs* (1883).

Looking at Todd's photograph, it is easy to mistake the compositional style for that of Watkins. Not only does Todd employ the raised ocular perspective so favoured by Watkins, he also utilises the curvature of the road in order to lead the audience towards the flooded land beyond. In a great variety of Watkins' images of California, the foregrounding of man-made structures like a road represents the subjugation of the natural world, and the encroachment of civilisation on territories hitherto unsettled before the closure of the frontier. Given that Todd's subject was the flooded orchards of Mr. Briggs & Riggs, the floodplain of debris and silt is reduced to a backdrop in a composition, which is neat and pleasing to the eye. To put the subject of Todd's commission into perspective, the plaintiff's attorney Cadwalader described the environmental impact of the debris and tailings from the North Bloomfield operation when he stated that, 'over 40,000 acres of highly improved and productive land has been covered to a depth of from two and fifty feet with the destructive material aforesaid, to the utter ruin of said land.' (Cadwalader, 1884: 9). Whilst the landscape Todd had been contracted to photograph was obviously dangerous, being full of the 'slickens and quicksands' (Cadwalader, 1884: 9), the scene he witnessed must have

been one of utter devastation, akin to observing the aftermath of a natural disaster. In Todd's photograph no sense of this chaos prevails. The silt and debris of the floodplain is not documented in any detail. Instead, Todd forms a picturesque scene out of the disaster zone: the tall tree on the right side of the image is placed to correspond with the rule of thirds and the sky glows with the warmth of sunlight, creating a vista that is deceptively pastoral. Arguably, Todd's commercial or professional preconceptions concerning the aesthetic compositional devices employed in the reproduction of landscape views supersede the intended evidential function of the image. Consequently, the long and detailed caption attributed to the photograph communicates more information concerning the flooded orchard of the plaintiffs than is readily apparent in the image itself.

If Todd's romantic depiction of the flooded orchards of Sutter County belies the intended evidential function of the image, his use of an extended caption becomes necessary in order to attribute blame to the North Bloomfield Mining Company for polluting the valley. Another way of describing the role that Todd's caption plays in the process of the court proceedings is to say that the caption provides a rhetorical function (Barthes, 1977: 49), which influences how the photograph is to be read. In the caption, language creates a series of signifiers that combine to connote a sense of 'victimhood' – e.g. the victims of the flood are personified by Mr. Briggs & Mr. Riggs, the lost orchard symbolises a vanished agrarian landscape and the distance of Sutter County from Marysville gives a sense of scale to the disaster. In the context of the *Edward Woodruff vs. North Bloomfield* [1884] trial, Todd's caption allows for two simultaneous readings of the photograph to occur. Denotatively, the image provides an indexical depiction of the landscape as it appears in its flooded state. Connotatively, the photograph becomes a stimulus for an imaginative interpretation of events surrounding the disaster – the jury is invited to speculate on how the landscape appeared before the flooding occurred, or to imagine the extent of the environmental damage beyond the boundaries of the frame. Given that North Bloomfield Mining Company is the defendant on trial, the purpose of

Todd's caption is to express solidarity for small farmers like Briggs & Riggs, whilst being critical of the indifference and negligence of the working practices at the hydraulic mine. It is significant that the velum has been overwritten with text on two sides, whilst a smaller body of text encloses the photograph on the top right corner of the frame. The text on the velum therefore encloses the photograph, and provides a rhetorical framework, which directs how the image should be understood. In order for Todd's photograph to function successfully within the jurisprudential context, it is essential that the relationship between the frame and the image be maintained.

The fact that Todd draws upon many similar framing devices to Watkins in order to describe the ecological devastation caused by hydraulic mining says much about the emergent status of photography in this early period of the medium's history; an era when all photographers relied upon 'aesthetic codes situated in [the] economic necessity' (Marien, 1993: 26) of commercial practice. Photography's implicit association with capital is emphasised by Marien when she comments that even the quasi-scientific California State Geological Surveys were not conducted solely for scientific purposes; the expeditions also provided valuable information concerning the location of mineral deposits or possible pathways for the construction of road or rail networks (Marien, 1993: 26). This observation leads Marien to conclude that photography in this era worked on behalf of capital, by transforming 'nature into property' (Marien, 1993: 26).

Given Marien's argument concerning the propensity of photography to function on behalf of capitalism in the late 19<sup>th</sup> century (ibid.), it is perhaps not surprising that Todd applies an aesthetic approach to documenting the environmental devastation wrought by hydraulic mining, which could be equally suited to photographing real estate on behalf of a wealthy patron. Aesthetically, Todd's photograph is unremarkable when viewed out of the legal context of the *Woodruff vs. North Bloomfield* [1884] proceedings. However, the importance of Todd's image lies in its application within the jurisprudential context, as a

form of evidence presented in opposition to the powerful industrial capitalists, who almost exclusively were responsible for the commissioning of photographic views in this era. If the case of *Woodruff vs. North Bloomfield* [1884] sets a precedent in US legal history for civil actions against industrial polluters, then Todd's photographs represent the naïve beginnings of an 'environmentally concerned' photographic practice, in which the photograph is used as a powerful tool in the struggle for environmental remediation.

#### 1:4 The 'Clinch' Images, A Counter-Aesthetic Approach to Watkins & Todd

Watkins' photographs of Malakoff Diggins and the similar aesthetic adopted by Todd when documenting the flooded environs of the North Bloomfield work differ significantly from a third series of photographs taken some time after the outcome of the *Edward Woodruff vs. North Bloomfield* [1884] proceedings. Dated in the US national archives to the year 1891, the 'Clinch' photographs (Figs. 9–11) were submitted as part of

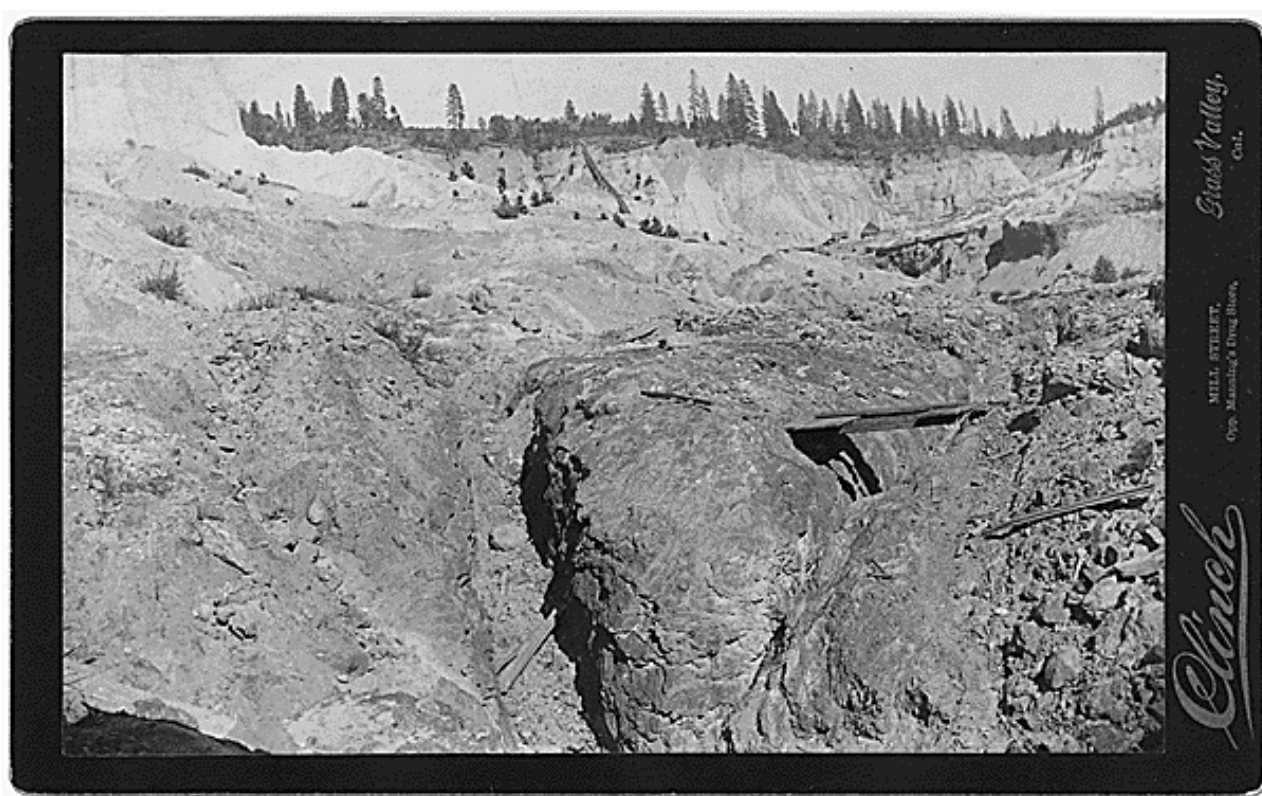


Fig. 9. 'Clinch' photographs (1) *US vs. North Bloomfield Mining Company*, (1897-1899).

subsequent legal proceedings taken against the North Bloomfield Mining and Gravel Company by the Federal Government, in the years 1897-1899. This legal case, known as the *US vs. North Bloomfield Mining Company* [1899], was again led by US Attorney Cadwalader, in an attempt to hold the company liable for the cost of remediating the damage caused by the floods. The extent to which the North Bloomfield Mining and Gravel Company remained active in the years after Justice Sawyer's initial verdict requires further examination. If the 'Clinch' photographs are dated correctly to the year 1891 (Fig. 10), the images take on significance because they depict hydraulic hoses in use some seven years after Justice Sawyer's verdict (7<sup>th</sup> January, 1884) made the technique illegal in California. However, it is also possible that the 'Clinch' images are dated incorrectly in the ARC National Archives, and were in fact taken at a similar time to Todd's photographs, just prior to the *Edward Woodruff vs. North Bloomfield* [1884] trial. If this is true, then aesthetic comparisons with the photographs of Todd and Watkins become all the more interesting.



Fig. 10. 'Clinch' photographs (2) *US vs. North Bloomfield Mining Company*, (1897-1899).

Contrary to the work of both Todd and Watkins, the 'Clinch' photographs maintain a low ocular perspective in relation to the sides of the Malakoff Diggins pit. Whilst the 'Clinch'

images lack the sense of the sublime engendered by Watkins' aerial viewpoints, the documentation of the eroded terrain appears to be visceral and immediate. In a number of the 'Clinch' photographs, the loosened bedrock of the Malakoff Diggins pit tumbles directly towards the camera, demonstrating that the floor of the mine became a chaotic sludge of rock and debris as a result of the hydraulic mining process. Unlike J.A. Todd's carefully composed view of the flooding downstream from the Malakoff Diggins pit, there is very little delineation of foreground, middle-ground, and backdrop in the 'Clinch' series (Fig. 11), with the majority of the composition being devoted to documenting the loosened bedrock. It would seem that the photographer was so intent on documenting the effects of hydraulic mining that secondary issues of composition were hardly considered, with little attention being paid to the location of a horizon line in the composition (Fig. 11). Overall, the 'Clinch' photographs document the effects of hydraulic mining at the Malakoff Diggins pit in a style that appears unprepossessing and seemingly unconcerned with aesthetic strategies of representation.



Fig. 11. 'Clinch' photographs (3) *US vs. North Bloomfield Mining Company*, (1897-1899).

In his description of the attributes associated with an artist, Kant states that an artist should exhibit skills that can be understood by observers but that are not easily repeated:



‘Only that which one does not immediately have the skill to do even if one knows it completely belongs to that extent to art’ (Kant, 2000: 182). In the case of the ‘Clinch’ photographs, there is no evidence that the photographer possesses this type of acquired skill or knowledge, which would separate them from other individuals. The overall impression provided by the ‘Clinch’ series is that the signature style of a professional photographer at work <sup>13</sup> is *not* evident in these photographs. The ‘Clinch’ images therefore represent a moment in the history of photography when the technology of photography was becoming accessible to non-specialists. If the ‘Clinch’ images can be considered to be free from the capitalistic signifiers associated with Watkins’ raised ocular perspective and more effective at documenting environmental despoliation, then the ‘Clinch’ photographs call into question the role of the professional or trained photographer in the documentation of industrial pollution.

Prior to the Eastman Kodak rollfilm revolution, the entire process of making a photograph was cumbersome and involved working with camera movements, handling wet or dry plates, calibrating exposure etc. Such complex processes were unlikely to be undertaken by an individual without a keen interest in the technical and aesthetic processes associated with photography. This changed, however, with the invention of the Kodak box cameras. In 1888 Eastman Kodak launched a new camera concept, essentially the Kodak No.1 camera ‘was a small box, containing a roll of paper based stripping film sufficient for 100 circular exposures 2 ½ in (6 cm) in diameter’ (Coe, 1989: 60). Camera users could then post the camera to Kodak for development, whereupon the negatives would be printed, a new roll of film inserted into the camera, and the whole package returned to the customer. The Kodak advertising slogan ‘You press the button, we do the

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<sup>13</sup> In the US National Archives (ARC National Archives, 2014) there are nine images described as exhibits in records pertaining to court proceedings, though the identity of the photographer remains a mystery. Email correspondence with Christine Hult-Lewis suggests that the name appearing on the vellum: ‘Clinch’, could either refer to an individual of that name or a company, as Hult-Lewis has found evidence for both possibilities (see Appendix i).

rest' (ibid.) summed up the ease of this new technology. From this point onwards, photography underwent a technical revolution leading the critic John Tagg to observe:

While aesthetes and pictorial photographers sought to salvage some prestige by preserving superseded techniques and arguing for the autonomy of photography as an art, an abating technical development ensure the vast expansion of photography [across] a whole range of scientific, technical, medical, legal and political apparatuses in which photography functioned as a means of record and a source of 'evidence'. (Tagg, 1988: 66)

The 'Clinch' photographs fit Tagg's description perfectly and when viewed in comparison to the photographic compositions of Watkins, and to a lesser extent those of J.A. Todd, the social revolution that was occurring at the time becomes immediate and tangible.

It is not certain if the 'Clinch' images were made with the case of *US vs. North Bloomfield Mining Company* [1899] in mind. If the 'Clinch' images are dated correctly to 1891, the trial was still some six years away. Nevertheless, it seems odd that the State of California would entrust a non-professional photographer with the important task of gathering the evidence necessary in order to bring charges against the North Bloomfield Mining and Gravel Company. It is precisely the mystery surrounding the identity of 'Clinch' that makes the photographs so intriguing: were the 'Clinch' photographs taken by a state official or were they taken covertly by someone with a grievance against the mining company? It is impossible to say. However, if a comparison is made between the 'Clinch' photographs and J.A. Todd's *View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr. Briggs and Mr. Riggs (1883)* (Fig. 8), it is necessary to consider the possibility that the 'Clinch' images are better suited to the jurisprudential context for which they were intended to function.

Although the 'Clinch' photographs exhibit little technical skill and evince no evidence of compositional techniques i.e. 'the golden section'<sup>14</sup>, the images clearly perform

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<sup>14</sup> The 'golden section' is a term that refers to classical ideas concerning proportion and harmony in the



one obvious function: the act of witnessing. Fittingly, the ‘Clinch’ photographs portray nothing of the anonymous individual who was their author; instead, their sole function is to describe the effects of hydraulic mining on the bedrock. The absence of a discernible artist behind the camera, who would seek to impose a style of representation upon the framing of the image, becomes something of an advantage in the context of the *US vs. North Bloomfield Mining Company* [1899] trial. Taking into consideration that photography was still a relatively new form of visual ‘evidence’ at the end of the 19<sup>th</sup> century, the ‘Clinch’ photographs evince a singularity of purpose that is wholly persuasive. It is precisely because the ‘Clinch’ photographs eschew the pictorial qualities of J.A. Todd, that they are successful in communicating the textural abrasions that the hydraulic mining process has exerted upon certain areas of the Malakoff Diggins pit. What the example of the ‘Clinch’ photographs demonstrates is that the quality of beauty and the photograph’s capacity for ‘truth-telling’ need not necessarily go hand-in-hand.

From a contemporary standpoint, when the ‘Clinch’ photographs are compared to J.A. Todd’s pictorial style, the break in the aesthetic tradition of representation which is palpable in ‘Clinch’ is reminiscent of the ‘amateurism [or] radical reductivist’ (Wall, 1995: 44) method, which Jeff Wall attributes to the ‘photoconceptualist’ approach of 1960s artists such as Ed Ruscha, Robert Smithson, Dan Graham etc. In *Marks of Indifference* (1995), Jeff Wall argues that photoconceptualism represented a radical break from the canonical traditions of photographic representation, which privileged technical sophistry, but it also can be considered as a reaction against capital’s appropriation of the pictorial aesthetic for the purposes of advertising (ibid.). If Carleton Watkins’ ‘sublime’ can be considered as a form of pictorialism, which functioned in order to legitimise capitalism’s environmental

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production of art, which was arguably popularised in Luca Pacioli’s *De Divina Proportione* (1509). In *De Divina Proportione*, Pacioli refers to the ‘sectio aurea’ or ‘golden section’ in the work of Leonardo Da Vinci, to argue that if a work of art could be divided into two unequal segments, so that the smaller segment was related to the larger, in the same way that the larger segment was related to the whole, the result would be a proportional relationship which was pleasing to behold (Meisner, 2014).

exploitation, then the ‘Clinch’ photographs can be considered as a counter-aesthetic approach, which prefigures photoconceptualism but shares with this later movement some important aesthetic characteristics.

In both ‘Clinch’ and photoconceptualism all that is considered ‘[...] “interesting” or “good” in terms derived from art photography is systematically and rigorously excluded’ (Wall, 1995: 44). The Photoconceptualists self-consciously broke with classical rules of governing composition and purposively reacted against the standards of printmaking espoused by the likes of Ansel Adams (Adams, 1983). Ed Ruscha’s *Twentysix Gasoline Stations* (1962) (fig.3) provides a good example of the photoconceptualist approach to aesthetics. Ruscha’s subject matter was intentionally repetitive and banal, and his preference of viewpoints which hug the ground or view the gasoline stations from the perspective of a pedestrian, further emphasise the ‘anti-commercial naturalism’ (Wall, 1995: 42) of the casual observer. Ian Walker (2012) observes that on a previous trip to Europe, Ruscha had taken a high quality professional camera and laboured over his negatives, often framing his subject with great care and attention. In *Twentysix Gasoline Stations* (Fig.3), however, Walker comments that ‘he [Ruscha] deliberately threw that competence out of the window. Making himself work like an amateur, his contact sheets show that he rarely made more than one image of any one gas station’ (Walker, 2012: 122). Notably, Ruscha’s *seemingly* casual approach to the framing of his images has led some commentators to describe Ruscha’s aesthetic as ‘deadpan’ (Cotton, 2004, cited in Vinegar, 2010: 30) and lacking in ‘subjective emotion or affect’ (Vinegar, 2010: 30).

Although the ‘Clinch’ photographs exhibit similar reductionist or amateurish qualities to that of the later photoconceptualists, they differ in one crucial respect. If the photoconceptualist approach was a self-conscious reaction against the pictorial standards demanded by photographers such as Ansel Adams, then the ‘Clinch’ photographs exhibit no evidence of a similarly ‘cool’, ‘detached’ or cerebral approach to the problem of image

making. There is no evidence that the ‘Clinch’ photographs were created in order to conceive of a purposeful counter-aesthetic to the received standards of the day; instead, the images are fully committed to the task of gathering ‘evidence’ with regards to the legacy of environmental pollution left behind by the hydraulic mining process. In the photographs of ‘Clinch’ (fig.11) the camera is completely engaged in documenting the erosion of the bedrock, even at the expense of the horizon. In this respect, the ‘Clinch’ images appear genuinely naïve in their framing of the Malakoff Diggins pit – there is no evidence of a postured, indifferent approach to the documentation of environmental pollution. This is what makes the ‘Clinch’ photographs so compelling, and it is precisely their un-conscious quality, which offers up the biggest challenge to the documentation of industrial pollution by a photographer who is trained in the production of images.

### **1:5 Robert Adams & the Photographer’s Bargain (with Capital)**

Robert Adams’ essay *Photographing Evil* (1996) provides an interesting starting point to a debate that seeks to address the ethics of photographing industrial structures, such as mines, for commercial benefit. Adams’ biographical account of photographing whilst on commission at an open cast mine in Ludlow, Colorado, provides an interesting late 20<sup>th</sup> century example of a model of photographic practice developed by Carleton Watkins some one hundred years earlier. The enduring influence of Watkins on contemporary photographers can be understood not only in terms of his aesthetic approach to the documentation of mining, but also in the legitimisation of the idea that the photographer has a role to play in documenting large-scale industrial activities on behalf of capital. Watkins’ particular skill for blurring the boundaries between the production of ‘beautiful images worthy of exhibition’ (Hult-Lewis, 2011a: 164) and the creation of sophisticated advertising photographs, which could help to generate confidence in an industrial operation represents a skill that is equally in demand in the present era. However,

it is important to stress that Watkins was solely a commercial photographer working within the cultural values of the 19<sup>th</sup> century, in which the concept of environmental stewardship was only just emerging. The same cannot be said for contemporary photographers, such as Robert Adams, who profess to have an artistic practice that is concerned with conservationist values. Adams' essay *Photographing Evil* (1996) is interesting to consider because it demonstrates the ethical quandaries that arise when a contemporary practitioner undertakes a commission for a mining company, in just the same way as Watkins did a century before.

In the essay *Photographing Evil* (1996), Adams begins his account by initially expressing frustration at his own inability to document the exploitation of mining communities in Colorado. Ruminating on his sense of failure, Adams recalls the motivations which led to his decision to photograph a memorial statue commemorating the Ludlow Massacre, erected in memory of the killing of miners and their families by the Colorado militia during a prolonged and infamous strike which took place in the spring of 1914. Explaining the background to his visit, Adams describes how he had been 'photographing beautiful mines' (ibid.) on a commercial commission in the weeks prior to visiting the Ludlow monument. In the course of the commission, Adams had witnessed the scenes of exploitation, which had clearly perturbed the photographer, who lamented the lack of resolve amongst the miners he had met to engage in industrial action like their Ludlow forbearers. Admitting that photographing the Ludlow monument was a symbolic substitution for the workers' lack of political solidarity in the present era, Adams expresses frustration at the limitations of photography to portray the 'evil' of social inequality when he comments: 'I was left at the end of the day with a sense of the uncertainty of evil, of the ambiguity of what photography could do with it, and of the fact of my own limited skills' (Adams, 1996: 65). Adams' comments concerning his inability to document the exploitation of the miners at Ludlow have previously been the target for criticism; in her essay *Of Mother Nature and Marlboro Men* (1989) Deborah Bright is unequivocal in her

condemnation of Adams' comments, but her criticism of Adams is in passing, and the implications of Adams' text deserve a more detailed analysis than Bright affords.

Having established his frustration with the lack of militancy in the mining community, Adams goes on to describe how the mining assignment had inspired him as an artist, which was presumably an important reason for accepting the commission in the first instance. In his depictions of the Colorado strip mines, Adams recalls that he had 'photographed pits cut by swirling roads as graceful as Robert Smithson's earthwork *Spiral Jetty* and rock faces so powerful and serene they reminded me of classical buildings' (Adams, 1996: 66). Unfortunately, Adams does not provide any photographs to illustrate the beauty of the strip mines he discovered in Colorado, and the images do not appear to have been published in monographs of his work. Nonetheless, Adams' account is of particular interest because of an admission that the photographer makes in his description of the beautiful vista he had photographed at the mine:

I loved some of the pictures, but I also knew that I hated the places themselves, and had been unable to record convincingly what was wrong with them – the carcinogenic residues that were being dumped into streams and air, for instance, and the broken social patterns the mines brought to nearby towns (Adams, 1996: 66).

Here, Adams' text takes a sinister turn. Not only had Adams been 'unable' to photograph the deprivation of the miners' settlements, he had similarly failed to document evidence of a variety of pollutants, which in all probability posed a significant threat to the health of the surrounding community and the ecosystem alike. Consequently, the reader is left to ponder if Adams, present at the strip mines in a commercial capacity, had actually attempted to document the industrial pollution he had discovered on location. After all, it is clear that it was not Adams' role to document the environmental failings of the mining operation but to create instead beautiful images on behalf of his employers. Significantly, Adams' text is not specific in addressing this issue.

Adams' account of photographing at the Colorado strip mines raises important questions concerning the role of the photographer in legitimising exploitative industrial operations. In *Photographing Evil* (1996), it is possible to argue that the acceptance of industrial pollution proceeds on two levels: (1) the photographer's commercial relationship with the mine-owners creates a situation whereby he/she feels unwilling or unable to document evidence of industrial pollution, possibly for fear of losing income; (2) the photographer's preoccupation with the beauty of the aesthetic qualities of the mine as an edifice is incompatible with a close examination of the effluents and particulate matter found within the industrial complex, which could confirm the presence of pollution but represents less appealing subject matter for the photographer. It is therefore essential to consider how the photographer's fascination with the appearance of industrial structures perpetuates a situation whereby industrial locations are lionised for their extreme aesthetic characteristics, whilst evidence of pollution or other environmental concerns, emerging from sites documented, are effectively suppressed in the pursuit of an aesthetically satisfying photograph.

### **1:6 Edward Burtynsky's Industrial Sublime**

In an interview with Michael Torosian (2005), the photographer Edward Burtynsky described seeing Watkins' prints for the first time at the Metropolitan Museum of Modern Art, New York, in the early 1980s. Recalling that the show had a profound impact on him as an artist, Burtynsky praises the quality of Watkins' prints, enthusing 'I have rarely seen prints that excited me as much as those landscapes.' (Torosian, 2005: 46). In the same passage, Burtynsky wistfully describes the toils of a 19<sup>th</sup> century photographer travelling through 'uncharted territory' (ibid.), and struggling with the fragile glass plate technology, before concluding:

I've often thought that if I had been born in that era that would have been the kind of photography I would have loved to do. Going out, and bringing back something the world had not seen before. The New West. It must have been an exhilarating time for photography, full of exploration and adventure" (Torosian, 2005: 46).

Burtnysky's characterisation of Watkins as a romantic adventurer, surveying the aesthetic and spatial frontiers of the New West, ignores the commercial and corporate affiliations that underpin the photographer's career. Commenting on Watkins' industrial photographs, Marien observes that Watkins' defining success as a commercial photographer relied upon constructing an impression of mining 'as an activity congruent with nature' (Marien, 1993: 8). This impression was created by integrating features of the mine such as scaffolding, walkways and sluices into the existent contours of [the] Earth's topography (ibid.). Contrary to Burtnysky's romantic description of the artist, Watkins' mining images succeed in constructing a specifically capitalist vision of the mining industry, which is visually compelling; Marien argues this point when she states that Watkins' photographs are 'so well composed and symbolically clear that it is difficult to think oneself outside the terms of the image to the socio-economic realities of his subject matter' (Marien, 1993: 9). In Watkins' use of the sublime, the values of capitalism become inescapable and totalising.

Over the course of the last thirty years Burtnysky has stuck with the assertion that his images form 'an open-ended narrative' (Burtnysky, cited in Campbell, 2008: 43), that amplifies 'environmental concerns' (ibid.) associated with mining. At the same time, Burtnysky also claims that his documentation of industrial super-structures 'celebrates technology and the [technological] knowledge we have gained' (Burtnysky, cited in Campbell, 2008: 46) as a species. This ambivalent political approach clearly benefits the artist when he needs to gain admission to sensitive industrial locations. In an interview with Craig Campbell, Burtnysky admits that mining companies 'usually give me access because I'm not going in there as an environmental activist' (Burtnysky, cited in Campbell, 2008: 46). Burtnysky also maintains an ambiguous ethical stance towards his audience,

believing that ‘forcing an issue down someone’s throat is not an effective strategy for communication’ (Burtynsky, cited in Campbell, 2008: 46). Despite Burtynsky’s intention to remain politically neutral as an artist, it could be argued that his reliance upon the various aesthetic techniques developed by Watkins, which Marien describes as examples of ‘propaganda generated as much by capitalism as by an individual’ (Marien, 1993: 3), affiliate the artist with a tradition of photographic representation, which historically connotes the values of capital.



Fig. 12. Edward Burtynsky, *Iberia Quarries No.3, Portugal* (2006)

It is revealing that Burtynsky admits to feeling an affinity with Watkins’ work, for in many respects the two photographers share much in common. More than any other contemporary artist, Burtynsky has taken the historical lineage of Watkins’ industrial



aesthetic to new spatial extremes (Fig.12). One prominent feature shared by both artists is that they document the land from an elevated perspective. Often Burtynsky employs a cherry picker, scaffolding or light aircraft in order to gain a commanding viewpoint at each location. In Burtynsky's mining photographs, the 'Apollonian' (Cosgrove, 2003: 3) gaze is utilised so continually that the feeling of viewing Burtynsky's huge 60x80 inch prints in the gallery space arguably becomes a disorienting experience. In addition to their mutual use of a raised ocular perspective, Burtynsky's work is comparable to Watkins' because both photographers use scale in their compositions in order to provoke a sense of 'the sublime' in the minds of their respective audiences. Although the technological developments in the manufacturing optics, film and printing paper allows for certain differences to exist between the work of Watkins and Burtynsky, the aesthetic qualities of 'the sublime' common to both photographers can be described as a range of technical decisions, which are combined in the framing of the image:

- I. The use of front and rear swing and tilt movements on the view camera, which enables the parallel and converging lines in the image to be controlled, thus further eliminating optical distortions.
- II. The decision to photograph under subdued lighting conditions in order to eliminate the presence of shadows or highlights with little or no tonal detail; in the case of colour photography this enables colours to reflect rich tonal values.
- III. The use of the view camera in conjunction with high quality optics, large format film plates and the capacity to precisely focus, ensures that an astonishing amount of focal detail is maintained at infinity throughout the image.
- IV. The focal length of the lens – Burtynsky reveals that he often prefers to use a telephoto lens and work at a distance from the large structures he photographs (Callahan, 2002: 94) in order to compress depth in the image and reduce the need for a foreground.

The combination of such various technical factors is instrumental in the creation of an image that reproduces space in a manner subtly different from how the human retina would view the same scene in reality. As Snyder & Allen make clear, the properties of the photographic image are a 'crafted [...] not a natural, thing' (Snyder & Allen, 1975: 152). How

a given photograph represents tonal differentiation or spatial characteristics within the instant of time during which the exposure was made, is dependent upon the various technical components – choice of camera system, optics, film type, developer, method of printing etc. – as much as it is reliant upon the vantage point and the intentionality of the photographer. This observation leads Snyder & Allen to conclude that:

Instead of saying that the camera shows us what our eyes would see, we are now positing the rather illuminating proposition that, if our vision worked like photography, then we would see things the way a camera does (Snyder & Allen, 1975: 152).

‘The sublime’ of Burtnysky, and to a lesser degree Watkins, can therefore be described as the photographic representation of large-scale industrial incursions on land, in which the indexical qualities of the image manifest in a subtly different form from the retina’s capacity to observe reality. It is perhaps this subtle difference in the interpretation of space that accounts for some of the emotional reactions an audience feels when it encounters Burtnysky’s photographs.

Perhaps the earliest example in Burtnysky’s practice of what the photographer refers to as ‘the industrial sublime’ (Burtnysky, 2003, cited in Dean 2003: 43), is the photograph *Mines # 22 Kennecott Copper Mine, Bingham Valley, Utah* (1983) (Fig.13). A huge open cast pit, the Kennecott Copper Mine measures four kilometres wide and one kilometre deep (ibid.). Burtnysky’s composition takes in the full height of the pit, which is cut out of the bedrock in steps, like a huge Roman amphitheatre. In the bottom right of the image, a pool of aquamarine solution provides the only dash of colour in an image otherwise comprised of earth tones and greyscales. In an interview with Catherine Dean, Burtnysky states that ‘The scale of the landscape is difficult to read until the viewer, spotting the minute trains and trucks at the base of the pit, perceives its enormity’ (ibid.) Commenting on his use of scale, both within the original composition and also in the 60x80 inch prints on the gallery wall, Burtnysky remarks that clues to the magnitude of the scene, such as a ‘tiny ladder or

some other detail' (Burtynsky, cited in Campbell 2008: 3), are intended to provide the viewer with a 'second reading of the image' (Burtynsky, cited in Campbell, 2008: 43), that is to say a moment of double-take, when the improbable scale of the vista is finally understood.



Fig. 13. Edward Burtynsky, *Mines # 22 Kennecott Copper Mine, Bingham Valley, Utah* (1983).

As large as Kennecott Copper Mine undoubtedly is, the scale of Burtynsky's image does not compare with Kant's concept of the 'mathematical sublime', which Kant applies to the perception of natural forms so vast, that they lie beyond our sensory capacity for comprehension. It is from Kant's concept of the mathematical sublime that Burtynsky takes his notion of the 'second reading of the image' but it is here the similarity with Kant's sublime ends. Unlike the mathematically sublime of Kant, Burtynsky's subjects are entirely conceivable in scale and fit neatly within the cropped proportions of the camera's lens. If Burtynsky's *Mines # 22 Kennecott Copper Mine, Bingham Valley, Utah* (1983) does not

suggest a Kantian sublime that is visually super-sensible to behold, then it becomes necessary to question in what way the term 'sublime' can be accurately attributed to the scene depicted in the photograph.

Burtynsky's photograph of the Kennecott Copper Mine is comparable to Watkins' *1083: Malakoff Diggins, Looking Northeast, near North Bloomfield, Nevada County (1871)* (Fig. 6) because both images document huge open cast pits, which were at the forefront of engineering technology for that era. Beyond the size of the industrial super-structures documented in each instance, both photographs allude to the astonishing organisational power of capital, and its capacity to overcome technological and logistical barriers in the search for new sources of profit (Harvey, 2010: 184). In his discussion concerning what he defines as the 'Marxist sublime' (Eagleton, 1989: 196-234), Terry Eagleton locates in Marx's texts an expression of a 'bad sublime', which is comparable to Hegel's concept of a 'bad infinity' (Eagleton, 1989: 212). In Eagleton's notion of the 'Marxist sublime', what is super-sensible to behold is capital's propensity to transform the physical world into an endless stream of commodities – the process whereby all things become quantified, and represented in monetary terms –:

Like Kant's mathematical sublime, this endless accumulation of pure quantity subverts all stable representation, and money is its major signifier [...] Money for Marx is a kind of monstrous sublimity, an indefinitely sprawling signifier which has severed all relation with the real, a fantastical idealism which blots out specific value as surely as those more conventional figures of sublimity – the raging ocean, the mountain crags – engulf all particular identities in their unbounded expanse. The sublime for Marx as for Kant, is *Das Unform*: the formless or monstrous (Eagleton, 1989: 212-213).

Using Eagleton's concept of a 'Marxist sublime', it could be argued that 'the sublime' in Burtynsky and Watkins' mining photographs does not actually derive from the physical description of the open cast pits, or even from the degree of environmental destruction portrayed in each image. If 'the sublime' is conveyed *at all*, it resonates from outside of the

photographic frame, on the trading floors of stock exchanges where minerals are bought and sold, in countless factories that manufacture products from copper, and in the networks of transportation, distribution and consumption, which conspire to generate capital. However, such a broad interpretation of what a photograph signifies risks losing sight of what is actually portrayed within the confines of the frame. Indeed, it could be argued that both photographs do not directly depict ‘the sublime’ – the vitality of capital is after all un-representable. It might be more accurate to suggest that both artists take as their subject matter the concept of voracious capitalism, which is suggested by the ‘Marxist sublime’.

Commenting on Burtynsky’s oeuvre, Jennifer Peeples (2012) provides yet another version of the sublime, which she terms as the ‘toxic sublime’. Peeples positions the toxic sublime as another form of the negative sublime, when she states that it exists as a ‘counterpart and required “other” to the technological sublime’ (Peeples, 2012: 380), as defined by David Nye (1994). In the toxic sublime, the object of sublimity does not represent human triumph, but instead signifies a form of environmental failure. Peeples’ toxic sublime can also be regarded as representing a state of “otherness” in relation to Kant’s concept of the dynamically sublime. Peeples argues that Burtynsky’s photographs show scenes of environmental destruction, which instinctively strike fear into the hearts of the audience. However, because this toxic scene is apprehended from a safe and comfortable distance (due to the technology of the photograph), it becomes possible to exercise reason in order to overcome our instincts. The crux of Peeples’ argument is that this two-stage process, which results in the triumph of reason, enables the audience to identify within themselves a newfound sense of environmental ethics by creating an awareness of ‘the need for alternative resource and waste protocols and decision-making’ (Peeples, 2012: 388). Confusingly however, Peeples also supports Burtynsky’s ambivalent approach to environmental ethics, by stating that Burtynsky’s sublime is not ‘intended to clarify, simplify or elucidate’ (Peeples, 2012: 387) environmental problems. Accepting that



Burtynsky's photographs are intentionally ambivalent in their attitude to environmental ethics, it seems questionable that the audience would arrive at an environmentalist consensus of their own accord.



Fig. 14. David T. Hanson, *California Gulch, Leadville, Colorado* (2005).

One of the problems associated with Peeples' notion of the toxic sublime is based upon the observation that due to the limitations of scale, Burtynsky's photographs do not always depict the presence of the toxic and fearful subject in any great detail. The process of copper extraction typically provides copper at a concentration of '0.5 to 1.0 percent' (EPA, 2013); several hundred tonnes of ore must be discarded for each tonne of copper extracted, meaning that beyond the frame a vast landscape of slag heaps, tailings and toxic leachate exists, which remains undocumented. Burtynsky's insistence on taking only one photograph, which is colossal in scale, prevents the artist from encountering the reality of pollution at first hand. This problem is compounded by the complete absence of supporting texts, which could impart further information to the audience, i.e. there is no use of captions or infographs, which could confirm the presence of toxicity in the landscape or provide further details concerning the nature of the industrial activities taking place in a given location.

If a comparison is made between the work of Edward Burtynsky and the artist David T. Hanson, it becomes possible to understand how additional texts can be employed alongside the photograph in order to foster environmental sensibilities. Hanson's

*Wasteland* project (1997) is an aerial survey of sixty-seven sites across the USA, which the US Environmental Protection Agency (EPA) has dubbed as 'Superfund' sites – locations that are highly toxic and in need of immediate remediation. Though Hanson's aerial photographs (Fig.14) represent a different genre of photography i.e. aerial photography, to the photographs discussed in this thesis, his method of incorporating photographs with extraneous modes or texts in order to influence how the photograph is understood, is worthy of passing consideration. Hanson's strategy is to exhibit in a triptych format, with the three panels combining to form a single framed piece (17 ½ x 47 inches). In each case, an aerial photograph of the toxic site is accompanied by an enlarged segment of a US Geological Survey map and a written statement from the EPA detailing the history of the location, the pollutants present and the remedial action required.

By introducing a multimodal approach to his chosen location, Hanson enables his audience to form ethical opinions about the subject matter in a way that is not possible with Burtynsky's 'sublime'. Contrary to Peebles' claims, Burtynsky's insistence on presenting the photograph without the provision of additional texts effectively 'deprives his images of any other reading, be it an ecological, social or cultural one by deflating the evidential real in favor of aesthetic value' (Cammaer, 2009). Whilst it is true that Burtynsky has never openly declared any sympathy for the ethics of environmentalism, his insistence that he is photographing industrial super-structures from a perspective that is politically neutral fails to acknowledge that the sublime is itself 'a thoroughly ideological category' (Eagleton, 1989: 90).

## 1:7 Conclusion

The similarities that exist between the mining photographs of Edward Burtynsky and Carleton Watkins, suggest that the contemporary use of the ‘industrial sublime’ has deep-rooted historical associations with capital, which can be traced back to Watkins’ commercial assignments. Given the historical complicity of the sublime with capital, I have questioned if the sublime, as an aesthetic approach to the documentation of industrial pollution, can be considered ethically commensurate with the core values of environmentalism. Moreover, using a Kant’s interpretation of sublimity, I question if the sublime can be represented photographically *at all*. Furthermore, my examination of Watkins’s enduring legacy as a corporate photographer has also led me to discuss the ethicality of photographers whose artistic practice is critical of land development, whilst also maintaining a commercial photographic practice that involves working on behalf of mining companies; here my case in point is the photographer Robert Adams.

In an effort to trace the origins of a form of photographic practice, which is ethically commensurate with environmentalism, I discuss the historical importance of J.A. Todd’s pictorial proto-environmentalist photographs, which represent the first occasion when photography was used for the purposes of prosecuting industrial polluters. My historical examination of the North Bloomfield works concludes with the mysterious ‘Clinch’ photographs, which are related to a secondary court case that the mining company faced, in order to secure reparations. In my reading of the ‘Clinch’ images, I claim the photographs are representative of a new kind of reductivist aesthetic, which was altering photography through developments in the mass marketing of photography to non-specialists. I therefore argue that what the ‘Clinch’ photographs offer, is a counter-aesthetic approach to the documentation of industrial pollution, which is not reliant upon notions of the sublime, or other aesthetic qualities associated with a professional photographic practice.



## Chapter 2: The Photographer as Environmental Activist

### 2:1 Introduction

This chapter examines a recent historical example of a politicised photographic practice, which utilises the medium of the photobook as a means of conducting environmental protest. The publication in question is Richard Misrach's *Bravo 20: The Bombing of the American West* (1990), a title which refers to an aerial bombardment range used by the US Navy, and is situated in the Great Basin region of the Nevada desert. Located only 150 miles due east of the North Bloomfield Mining and Gravel Company's works, and documenting events that occurred a century later, Misrach's *Bravo 20* provides an interesting and comparative accompaniment to the proto-environmental activism of J.A Todd and 'Clinch', as described in the previous chapter. By the 1980s, the cultural concept of environmentalism, and the model of the photographer as an activist, is firmly established through Misrach's association with a number of anti-military pro-environmental campaigners, who were vociferous in their opposition to the US Navy's ongoing activities at the Bravo 20 bombardment range. In the chapter that follows, I make a case for understanding Bravo 20 as an example of an activist photographic practice, in which as Michelle Bogre observes the activist photographer 'believe[s] that the viewfinder can – or maybe must be – a political instrument' (Bogre, 2012: 7). In this chapter, I therefore make a distinction between Misrach as an environmental activist and forms of conservationism in art, as espoused by the likes of Ansel Adams.

Whilst the photobook is credited to the photographer Richard Misrach, the publication is actually an important example of collaboration between multiple authors, each with different areas of expertise. Primarily, *Bravo 20* was written as a partnership between Richard Misrach and his wife Myriam Weisang Misrach (henceforth described as MW Misrach), but it is also the product of a much larger effort involving the Nevadan

architects Burton & Spitz, as well as help from a network of local eco-activists, most notably Dr Richard Bagen and Dick Holmes <sup>15</sup>. *Bravo 20* is therefore an important publication for my artistic practice because it provides a model for understanding that the photographer has a role to play in working within environmental activist networks.

Having made a case for Misrach's *Bravo 20* as an example of environmental photographic activism, I then proceed to discuss Ellul's (1973) concept of pre- and active-propaganda in order to draw a distinction between a politicised form of artistic practice and the production of propaganda for politics. Allied to my discussion of what constitutes a politicised form of artistic practice, I also use Barthes' concept of 'anchor and relay' (Barthes, 1977: 32-51) in order to consider if the photograph alone is capable of communicating a cogent environmentalist message.

## **2:2 The Political Backdrop of *Bravo 20***

The publication *Bravo 20: The Bombing of the American West* (1990) begins with an essay by MW Misrach, which is crucial to the understanding of Misrach's photographs because it places Misrach's images against a highly politicised and volatile backdrop of unrest and civil disobedience, which was occurring at the time when Richard Misrach composed his photographs. MW Misrach's 'The Story' represents a significant body of research and investigative journalism in its own right. Providing an overview of the expansion of US military test sites in Nevada after WWII, the text also functions as a précis for the struggles of various Nevadan activists who fought against the military presence in their state in the mid-1980s. In 'The Story', MW Misrach employs diagrams, transcripts of letters, interviews, and first-hand accounts of public meetings, which occurred between anti-military activists and representatives of the US Navy, in order to describe the

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<sup>15</sup> Whilst I fully acknowledge the role that other authors play in the creation of *Bravo 20*, for the sake of ease I refer to *Bravo 20* throughout my analysis as Richard Misrach's publication.

heightened civil tensions that were characteristic of the period. Writing at the time of the Reagan administration at the height of the Cold War, 'The Story' evokes the acute unease of many westerners who felt besieged by their own military forces (MW Misrach, 1990: 14).

Unlike other Nevadan Test Sites, Bravo 20 was not a secret military installation, though the site does form part of a network of military test sites, many of which are classified. As Trevor Paglen explains, the origin of military expansionism in the western United States derives historically from the success of the Manhattan Project during WWII. According to Paglen, the Manhattan Project 'set the black world <sup>16</sup> in motion' (Paglen, 2009: 93), with the result that 'The bomb had begun to transform the state in its own image' (Paglen, 2009: 93) According to MW Misrach, the proliferation of military test sites in The Great Basin region was partially the result of state secrecy, but also capitalistic rivalry between the three branches of the military – Army, Navy and Air Force – who engaged in acts of 'territorial competition' (Dyer, 1985, cited in MW Misrach, 1990: 14) in order to defend their competitiveness as 'activity spheres' (Harvey, 2010: 123) in the state-sponsored economy ('black' or 'white') that is military defence procurement. In the latter part of the 20<sup>th</sup> century, large swathes of the Nevadan desert are occupied by the military and used as proving grounds for highly profitable emergent military technologies, which affirm the 'territorial logic' (Harvey, 2010: 204) of the fiscal-military state. During the mid-1980s, the eminent threat of Soviet aggression constituted a state of national emergency, which for many Nevadans excused the continual military incursions on the populace.

One of the themes explored in MW Misrach's 'The Story' concerns the US military's acquisition of land that holds particular significance to the Native American population of

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<sup>16</sup> In describing what he means by the term 'Black World', Trevor Paglen writes:

Every year, the United States spends more than \$50 billion to fund a secret world of classified military and intelligence activities, a world of secret airplanes and unacknowledged spacecraft, "black" military units and covert prisons, a secret geography that military and intelligence insiders call the "Black world [...]" Approximately four million people in the United States hold security clearances to work on classified projects in the black world. By way of contrast, the federal government employs approximately 1.8 million civilians in the "white" world. The black world, then, represents millions of jobs. It also represents accumulated knowledge and history (Paglen, 2009: 4).

Nevada. The creation of ‘national sacrifice zones’ (Davis, 1993) in the territories of indigenous communities can be understood as a form of ‘nuclear imperialism’ (Kuletz, 1998, cited in Woodward, 2004: 75), which the territorial state exerts upon the indigenous population. As MW Misrach illustrates in her essay, Bravo 20 is located on a sacred Paiute site, whilst other military installations in Nevada, such as the Nellis AFR, also exist on Indian territories. However, the indigenous population in Nevada was not the only victim of the militarization of civilian life. MW Misrach observes that the Bravo 20 range was consistently ‘bombed to smithereens, and polluted with extremely noxious materials’ (MW Misrach, 1990: 47) by the US Navy. Furthermore, both humans and animals were subjected to up to one hundred sonic booms per day; not to mention the risk of bombs landing off target, electromagnetic radiation emitted by aircraft systems, and, on rare occasions, aircraft crashing (MW Misrach, 1990: 10-11). Trevor Paglen argues that for many Nevadans, the cumulative effect of the military’s nuclear and ballistic testing programs made it almost impossible to distinguish between military exercises in peacetime, and life in a real theatre of war (Paglen, 2009: 60).

Before the reader proceeds to encounter Misrach’s photographs in *Bravo 20*, MW Misrach provides an excellent overview of the civil conflict, which reached its zenith the same summer that Misrach began to work on the bombardment range. Significantly, two of the Nevadan activists Dick Holmes & Dr. Richard Bagen, had unearthed by chance legal documents that proved the US Navy’s ground lease for Bravo 20 had expired decades earlier, and that the US Navy was effectively bombing the Nevadan desert illegally:

In 1973 the BLM (Bureau of Land Management) authorized Standard Oil of California to begin exploratory drilling in a particular section of the Carson Sink. The record fails to show exactly what happened, but it is likely that the crew went out there to work and then realized something had gone drastically wrong. The land they leased looked like something out of a science-fiction scenario – bombs thrown helter-skelter on pock-marked ground, craters filled with unearthly colored water, shrapnel and mangled military vehicles as far as the eye could see.

The BLM conducted a hasty investigation and came to a jarring conclusion: the public land on which it had so blithely divvied up drilling rights had been used by the Navy as a bombing range since 1944. Two oil and gas leases were in fact located smack in the middle of the primary bombing target.

Even more startling was the fact that the Navy had been bombing Bravo 20 illegally for all those years. The original 1944 permit contained a self-terminating provision stating that it would elapse six months after the national emergency ended, that is, on 28 October 1952 (MW Misrach, 1990: 26).

When Holmes & Borgen informed congress of their findings, they soon learnt that 'lawmakers just were not interested in the illegal bombing of a piece of desert' (MW Misrach, 1990: 28). The incredulity of Holmes and Borgen was well founded, for they had learnt that despite the USA's claims to democratic equality, as enshrined in the *Bill of Rights*, it required the will and protection of the state legislature to enforce those rights. Subsequent to Holmes & Borgen's discovery that Bravo 20 was public land, the pair proceeded to orchestrate a campaign to occupy the bombing range, bringing together a diverse mixture of activist groups <sup>17</sup> in a sit-in, which temporarily suspended the US Navy's operations. This occupation was in turn met with various examples of state-sponsored violence (MW Misrach, 1990: 28) and intimidation. It was in this context that Misrach began to photograph, staying on location in solidarity with other protesters for weeks at a time in his camper van <sup>18</sup>, and taking personal risks as he worked around the unexploded ordinance that littered the bombardment zone.

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<sup>17</sup> MW Misrach also recounts how the protests at Bravo 20 became a nexus for environmental campaigners from 'the Audubon Society and other conservation groups' (MW Misrach, 1990: 32) as well as 'representatives from several Indian tribes' (MW Misrach, 1990: 33) and 'residents from all over the state and as far away as Utah' (ibid.)

<sup>18</sup> In 'The Story', MW Misrach recounts a number of occasions when the protesters were arrested by the local police (MW Misrach, 1990: 30), subjected to harassment by military aircraft (MW Misrach, 1990: 31), had their camp and water supplies destroyed by members of the military (ibid.) and were the recipients of death threats over the phone. (MW Misrach, 1990: 35) However, the 'camp-in' (MW Misrach, 1990: 33) did succeed in halting the military exercises during the summer of 1985, when Misrach composed his photographs of the Bravo 20 site.

## 2:3 From Satire to Protest

Given that *Bravo 20* exists as a collaborative effort between various authors – Misrach, MW Misrach, Burton and Spitz, Miller, Salinas, and the activists Holmes & Bergen (this list is far from exhaustive) – it is necessary to consider how Misrach’s photographs function within the wider context of the *Bravo 20* publication. *Bravo 20* is not a conventional photobook publication consisting of an introductory essay, followed by a series of photographic plates. Whilst Misrach’s images are presented in the traditional format of the photobook, with photographs on the right side of the spread and captions on the left, the photographic series (Chapter 2) is found sandwiched between MW Misrach’s essay ‘The Story’ (Chapter 1) and various architectural drawings and texts which make up ‘National Park: A proposal’ (Chapter 3). The fact that Misrach’s photographs are situated between these two supporting chapters is important when considering how meaning is connoted onto Misrach’s photographs by the existence of texts, which are extrinsic to the photographic series but intrinsic to the publication as a whole. The tripartite structure of the book, in which Misrach’s photographs are situated as part of a larger discursive framework, accurately reflects the collectivist ethos that underpinned the publication’s activist origins.

Although *Bravo 20* is published under Richard Misrach’s name, and it very much remains a book that is primarily concerned with the photographic image, the existence of other modal forms – activists’ accounts, correspondence from state officials, scientific reports, illustrations, maps, architectural plans etc. – are significant when considering how the overall design of the publication serves to politicise the aesthetic content of Misrach’s imagery. Of particular significance in the political framework of *Bravo 20* is the third chapter, entitled ‘National Park: A proposal’. Here, Misrach departs from the role of photographer, offering instead a proposal to turn the Bravo 20 bombing range into

America's newest national park. In this instance, Misrach's contribution <sup>19</sup> comprises various architectural drawings of the proposed site, which are presented with a text, which is both humorous and polemic. Although Misrach claims that this third chapter 'National Park: A proposal' was intended to be a 'satire' (Misrach, cited in Dusseault, 2000), Misrach's self-effacing comments deflect attention away from the potency of the proposal, which suggests a novel way in which the aesthetic medium of the photobook can be used as a means of conducting environmental protest.

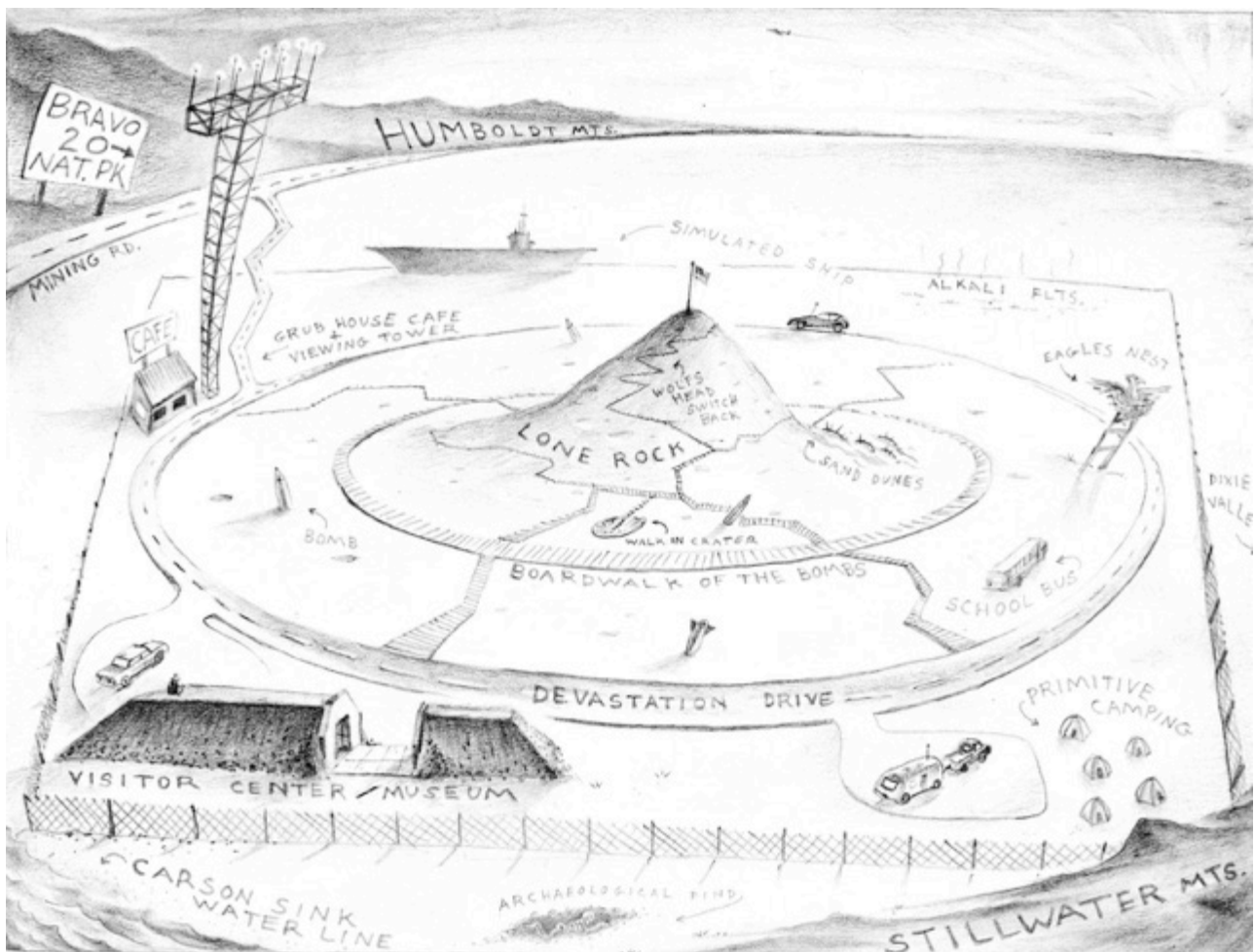


Fig. 15. Richard Misrach, illustration showing some of the proposed national park features, taken from *Bravo 20: The Bombing of the American West* (1990).

As part of 'The Story', MW Misrach recounts how congress conspired to renew the US Navy's ground lease, subsequent to Holmes & Borgen's discovery that the initial ground lease had expired and that the US Navy were illegally using the Bravo 20 range for military

<sup>19</sup> In order to assist Misrach in his proposition, numerous other authors are also credited in this concluding chapter including: Burton and Spitz for their expertise as landscape architects, Matthew Miller for his architectural drawings, Rico Salinas's for his illustrations, and MW Misrach for her additional input.

testing purposes (MW Misrach, 1990: 28). Congress subsequently passed a motion for a second ground lease, which was set to expire on the 6<sup>th</sup> November 2001 (Misrach, 1990: 95). Misrach's 'National Park: A proposal' demands that congress return the territory of Bravo 20 to 'the public domain, from which it was unlawfully confiscated, and [to] transform the 64 square miles of bombing range into America's first environmental memorial' (Misrach, 1990: 95) on the same date that the US Navy's lease was set to expire in late 2001. 'National Park: A proposal' is therefore a riposte to congress's disavowal of the Nevadan protesters' call for due legal process to be followed in the case of Bravo 20, and for the desert to be demilitarised.

Although Misrach claims that his national park proposal was a 'satire' (Misrach, cited in Dusseault, 2000) his comments belie the earnestness of the project, which is quite thoroughly developed in the *Bravo 20* publication by the range of architectural drawings on display, accompanied by a detailed breakdown of costs associated with the construction of the project. 'National Park: A proposal' is sufficiently detailed to ensure that the plan cannot be dismissed as an art-joke, or a mere afterthought in a photographic monograph. Given the gravity of the issues explored in *Bravo 20*, the ambitious and outrageous plan of converting a US Navy bombing range into a tourist attraction is worthy of much greater consideration than many critics have afforded the idea. Setting aside the architectural merit of the various plans and sketches that constitute 'National Park: A proposal' (Fig. 15) – which include a glass-fronted visitor centre & museum, campsite, café, viewing tower and a raised 'boardwalk of the bombs' (Misrach, 1990: 96-119), in which visitors can tour the Bravo 20 landscape, the accompanying text leaves the reader in no doubt as to the polemic nature of the proposition.

From the outset, Misrach's prose delivers a carefully calculated diatribe against military violence, informing the reader that the visitor's centre and museum will be devoted to the history of military abuse in peace time' (Misrach, 1990: 95). Acknowledging that the



militarization of Nevada has disproportionately affected the local Native American population, Misrach also writes that the sole promontory of Lone Rock will hold particular significance in the plan, because of the point's religious importance to the indigenous community' (Misrach, 1990: 95). Furthermore, a series of plaques throughout the site will provide visitor information on topics including the sand dune biota, the history and heritage of the indigenous people and the archaeological significance of the region (Misrach, 1990: 100-119).

Central to the idea of a national park is the construction of a museum and visitor centre, which serves to emphasise the proposal's commitment to education and the dissemination of knowledge. Misrach writes that the museum will annually host 'representatives from Indian tribes, citizen groups, government officials, military personnel [in order to] address issues of cohabitation with the military' (Misrach, 1990: 95). It is also envisaged that the museum will house film and video archives (ibid.) that shall catalogue various military crimes against the environment with the purpose of mapping the military's trail of environmental destruction on land <sup>20</sup>. A humorous edge is given to the proposal when Misrach envisages a grim parody of a conventional museum gift shop, which shall stock a range of souvenirs that are critical of militarism, including 'bombs away' mugs and bumper stickers, as well as 'camouflaged porta-potty salt and pepper shakers' (Misrach, 1990: 96), alongside a variety of more serious products including maps that represent radioactive landfills sites, national trajectories of nuclear clouds and depictions of military land and airspace use within the USA (Misrach, 1990: 96). Reading Misrach's text, it becomes difficult not to laugh at the prospect of having a family picnic beside the bomb craters on the aptly named 'Devastation Drive', a 12.5 miles circular road that is shaped like a bull's-eye (Fig.17), or eating in the camouflaged 'Grub House Café' (ibid.), which is

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<sup>20</sup> Many of Misrach's ideas have come to be realised through 'The Center for Land Use Interpretation' (CLUI, 2013), in particular they have an online database of locations within the US where catastrophic military and industrial pollution has occurred.

advertised as open by virtue of a neon sign shaped like bomb, which sits astride the café roof.

In order to fully appreciate why *Bravo 20* is such a provocative text, it is necessary to understand that congress is the body of the legislature that sanctions the creation of national parks whilst also ratifying the military's occupation of bombardment ranges, such as Bravo 20. In theory, Misrach and his comrades were asking the Senate and the House of Representatives to sanction a proposal that indirectly implicated congress (via their patronage of the military) in the unlawful confiscation of land, crimes against humanity associated with nuclear testing, persecution of indigenous people, unlawful pollution and other military abuses of the peace. Effectively, congress was being asked to indict itself.

Whilst 'National Park: A proposal' masquerades as a satirical joke, the proposition operates in the manner of a Trojan Horse, for hidden beneath the humorous talk of bumper stickers and salt shakers lies a concerted attack on the legitimacy of congress and the concept of conservationism as espoused by the National Park Foundation. However, even though 'National Park: A proposal' was a political protest that was never formally enacted, it remains a potent example of how the photobook can be used to challenge and resist the hegemony of the state. Some twenty years after the proposal was first aired; activists in Nevada created an electronic petition calling for congress to examine the possibility of creating a national park at Bravo 20; prompting Misrach to state in an interview with the artist Ruth Dusseault that the proposal has gone 'from satire to serious consideration' (Misrach, cited in Dusseault, 2000).

## **2:4 Environmentalism vs. Conservationism**

As early as 1864, congress declared Yosemite a State Park, but it was not until 1890 that Yosemite achieved full national park status (Deluca, 2001). Whilst John Muir is widely

credited with the creation of America's first national park, Kevin DeLuca argues that the influence of capital in the form of the Southern Railroad Company was a more influential factor in congress's decision-making process (Deluca, 2001). From the outset, Yosemite was 'preserved' as a wilderness because of its potential as a tourist attraction, which could easily be accessed by rail. In the promotion and advertising of Yosemite as a destination, photography played a crucial role in promulgating a myth of the American 'wilderness', which came to the fore after the closure of the frontier. Significantly, Deluca notes that in Muir's two articles for *Century* magazine (August & September 1890), which famously called for the establishment of national park status, Muir included some twenty-two of Carleton Watkins' photographs of Yosemite amongst his thirty pages of text (Deluca, 2001). Just as in the case of the US Geological surveys, when photographs of the western seaboard were used as an impetus to stimulate capital investment in activities such as mining (Marien, 1993: 26), photographs of Yosemite prefigured the development of a tourist industry, which was centred around the concept of national parks.

In the early to mid-20<sup>th</sup> century, the relationship between photography and the conservationist ethos of the National Park Foundation continued to achieve substantial public recognition through the work of Ansel Adams and The Sierra Club. Founded by John Muir in 1850, The Sierra Club has campaigned for the preservation of 'wilderness' areas across the United State ever since its inception. Notably, Ansel Adams joined The Sierra Club in 1916 (Sierra Club, 2013) and was to remain a life-long member of the organisation. Just as John Muir illustrated his texts by using Watkins' Yosemite photographs, The Sierra Club often published Adams' images as an accompaniment to Muir's writings, whilst Adams also curated photographic exhibitions and published monographs featuring his own photographs or the work of other practitioners. For many Americans, advertisements and publications deriving from The Sierra Club was one of the most common means of coming into contact with Adams' work.

In an attempt to describe the underlying motivations that lie behind Adams' relationship with the ethos of conservationism, Rod Giblett comments that Adams' preoccupation with 'nature' was largely centred upon the creation of 'sanctuaries, those special places for plants and animals and those aesthetic landscapes' (Giblett, 2011: 141), which were intended for the purpose of taking privation from 'the depredations of modern urban industrial capitalism' (Giblett, 2011: 141). This then, was the intended function of the national park. In one of the photographer's early photographs, *Monolith, the Face of Half Dome* (1927) (Fig. 16), Adams draws attention to what Rebecca Solnit refers to as the 'vastness and magnificence' (Solnit, 1999: 231) of the Half Dome escarpment, which represents for Adams the sublime object of 'nature'. According to Rod Giblett (Giblett, 2011: 141), Adams' motivation for employing the sublime as an aesthetic strategy lies in his need to emphasise that capitalism exists as a perverse anomaly in the development of the Earth, when compared to the vast aeons of geologic time that exists in artefacts present in the natural world.

Nathan Stormer argues that at the heart of Adams' use of the sublime is a profound psychological reaction against capitalism, which Stormer terms as the 'hygienic sublime' (Stormer, 2004: 230). According to Stormer, Adams' photographs convey a 'rhetoric of rebirth, embodying a masculinized, culturally hygienic motive' (Stormer, 2004: 230), which can be considered as a profound reaction against the ubiquity of pollution in contemporary society.<sup>21</sup> It is notable that Stormer's interpretation of the hygienic sublime shares much in common with Andy Grundberg's earlier observation concerning Adams' approach to documenting 'nature'. Grundberg argues that Adams regards 'nature' as being fundamentally unthreatening towards humanity, commenting that Adams depicted 'nature as scenery' (Grundberg, 2010 [1984]: 33), and that he held a 'fundamentally hygienic

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<sup>21</sup> Writing about pollution in contemporary life, Adams comments: 'The fact that [Man] has fouled his nest and seems certain to continue with his destruction seems now more of an illness than an expression of evil intent' (Adams, 1979, cited in, Stormer, 2004: 231).

conception of the world' (ibid.). Grundberg argues that when Adams did document sharp cliffs or deep gorges, it was from a largely unthreatening perspective (ibid.) that did nothing to dissuade the audience from perceiving 'nature' as being available for the delight and 'delectation' (ibid.) of the audience. Essentially, Grundberg argues that Adam's interpretation of the natural world is profoundly informed and shaped by an ethical approach to 'nature', which seeks to conserve ecosystems as part of the function of the national park system. It is therefore possible to take Stormer and Grundberg's interpretations of Adam's Yosemite photographs, and argue that Adams' pictorialism functions as a form of protest against the various ecological and societal privations of capitalism; however, it does so without ever *directly* addressing the root cause of environmental destruction, which is capitalism itself.

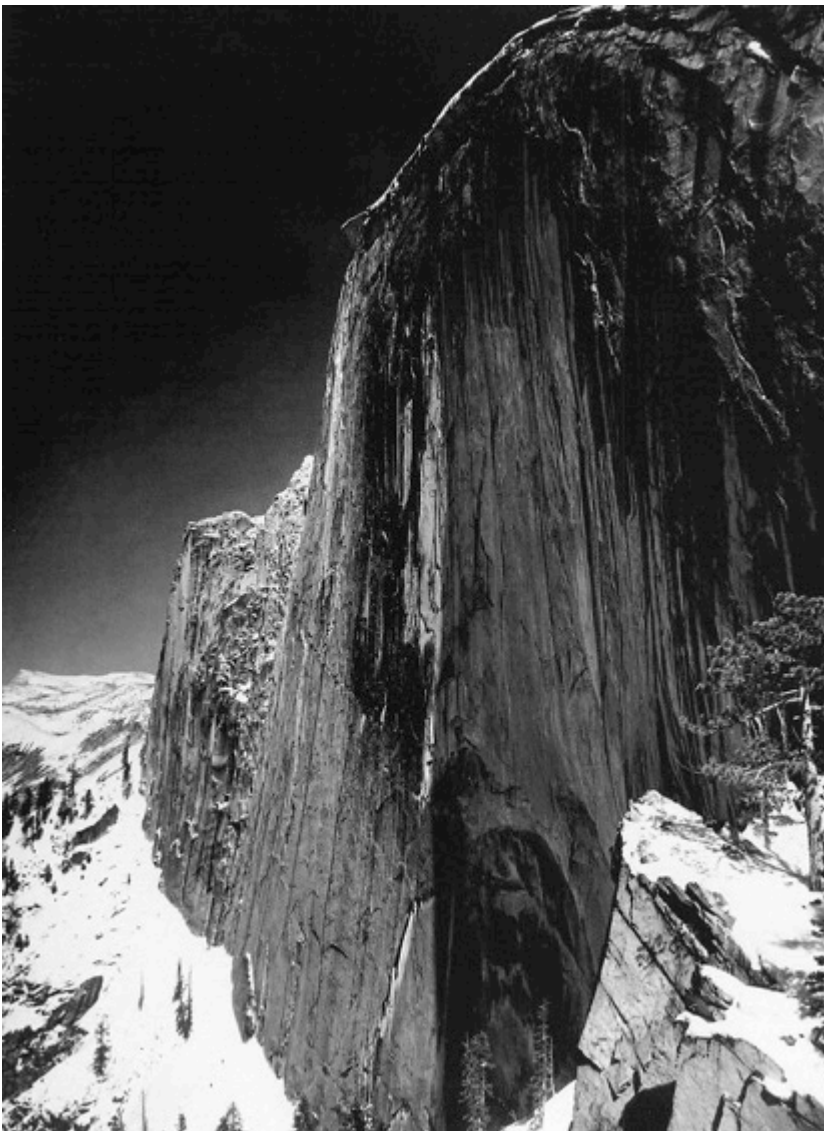


Fig.16. Ansel Adams, *Monolith, the Face of Half Dome*, (1927).



Fig.17. Richard Misrach, *Crater and Destroyed Convoy* (1990).

The example of Yosemite National Park illustrates the division that has been at the heart of the ‘Green Movement’ for decades, between conservationism (understood as species preservationism within the construct of the national park) and its more radical counterparts such as deep ecology, social ecology, and more militant anarcho-syndicalist movements like *EarthFirst!* who favour forms of direct action and sabotage (Taylor, 2008). This ethical dispute has long historical associations that can be traced back to influential early 20<sup>th</sup> century commentators such as Aldo Leopold (Leopold, 1987: 9), who regarded conservation of ‘wilderness’ areas as an unsuccessful experiment because it failed to address the universal commoditisation and domination of the natural world under capitalism. From an environmentalist’s perspective, conservationism’s idealised vision of the natural world fails to address the fundamental ethical shift that is required in order to move beyond the current environmental crisis. Viewed from an early 21<sup>st</sup> century

perspective, conservationism's inherent limitations – the preservation of distinct areas of land or sea from development or exploitation as defined within the cultural framework of capitalism – seem all the more striking in the aftermath of scientific evidence, which purports to show that global warming has reached (if not surpassed) a tipping point, meaning that climate change has now become an irreversible reality.

If Ansel Adams' aesthetic of the sublime can be interpreted as being analogous with the ethical values of conservationism/preservationism, then Misrach's *Bravo 20* can be regarded as conservationism's 'dystopian counterpart' (Kumar, 2011). Misrach's photographs are indicative of an activist approach to the despoliation of the land by capital because they confront the ugliness of pollution directly and in locations that have not been deemed worthy of preservation by the National Park Foundation. In her attempt to identify the qualities that constitute an activist photographic practice, Michelle Bogre argues that 'Activists can't separate photography and politics (Bogre, 2012: 8) and that the activist photographer 'believe[s] that the viewfinder can – or maybe must be – a political instrument' (Id.: 7). Whereas Adams' is content to valorise the majesty of the natural environment in his photographs, his refusal to *directly* address contemporary environmental problems allows for a distinction to be made between the work of Adams and that of Misrach. This difference in approach is explicit not only in Misrach's choice of subject matter – the subject matter of military pollution, as opposed to Adams' hygienic of the sublime – but also in how Misrach frames his photographs in order to achieve maximum political impact.

In a photograph typical of *Bravo 20*, such as *Crater and Destroyed Convoy* (Fig.17), Misrach takes up a camera position that is close to the ground (I refer to this idea in section 3:3: 'The Activist's Perspective') with the result that the bottom third of the image is taken up by the chaotic texture of the blast-impacted sand. Most strikingly, the central portion of the image is occupied by the bomb crater, which is filled with an ominous red toxic residue.

Although the size of the crater is difficult to estimate it can be no more than twenty feet across, which indicates Misrach's commitment to be both up-close and personal in his depiction of the bombardment zone. Above the crater, the chaotic violence of the scene is further signified by the remnants of vehicles, which have been used as targets by strafing aeroplanes. The impacted metal from the convoy litters the surface of the desert, with the result that Misrach's depiction of the desert is of an environment that is strewn with not only ordinance and toxic effluents, but also by countless shards of metal shrapnel; the desert topography is therefore portrayed by Misrach as a body of land scarred by the vestiges of conflict. Misrach's approach to photographing his subject matter is both stark and confrontational; his style is about identifying individual features in the landscape, and framing these objects centrally in order to emphasise the presence of pollutants. Beyond their attributes as aesthetic objects, the function of Misrach's photographs is clear – they provide a form of 'visual testimony' that directly and unambiguously implicates the US Navy in crimes against the environment.

## **2:5 Art, Text and Propaganda**

Any form of politicised artistic practice will always have its detractors, and Misrach's *Bravo 20* was no different. Comments taken from the guestbook of the *Bravo 20* exhibition, which occurred at the Sheppard Gallery in the University of Nevada, Reno (1991) (Fig. 18), indicate that whilst a great many of the visitors supported the anti-military stance of *Bravo 20*, the exhibition also provoked a backlash from some Nevadans who shared pro-military sentiments. The negative reaction to *Bravo 20* was inevitable considering that the exhibition had been widely touted in Nevada; the Reno Gazette & Journal had carried media coverage for the exhibition, but it had also been widely disseminated in the activist publication *Citizens Alert* (McNamara & McCormick, Nevada State Council on the Arts, 1991).



IT'S HARD TO BELIEVE, RICHARD, THAT YOU EXPECT PEOPLE TO SWALLOW THIS SNIVLING, LEFTIST, ENVIRO ~~PRATT~~ BABBLE. A GOOD CASE IN POINT IS THE FISH KILL. IT CAN BE ARGUED THAT WHAT KILLED THE FISH MIGHT HAVE BEEN A LACK OF SOMETHING IN THEIR ENVIRONMENT (H<sub>2</sub>O?) RATHER THAN SOME TERRIBLE CHEMICAL OVSIGHT BY THE NAVY. WHAT I SEE HERE IS ANOTHER ATTEMPT TO STIFFEL <sup>(spelling error)</sup> THE INDUSTRIAL-MILITARY ESTABLISHMENT HERE IN NEVADA. THE PHOTOS ARE ONLY OF MODERATE TECHNICAL MERIT BUT INTERESTING NONETHELESS. I DON'T KNOW IF YOU ARE AWARE OF THE MILLIONS OF SQUARE MILES OF THIS EXACT TYPE OF ECO-SYSTEM, TOPOGRAPHY AND ANIMAL LIFE (A LACK OF IT) THAT EXIST IN THE GREAT BASIN, THAT ABSOLUTELY NOTHING IS HAPPENING ON, AND THAT THE NAVY IS NOT INVOLVED WITH. THE NAVY PILOTS THAT HAVE TRAINED ON BRAVO 20 FOR MANY YEARS ARE NOW AS I WRITE THIS SAVING YOUR COUNTRYMEN FROM THE WRATH OF THE LARGEST ARMY TO PEACE AND THE ENVIRONMENT, THE RULE OF IRAP. KEEP BRAVO 20 OPEN AND SAVE THE PLANET.

Tom Paul

Fig.18. Extract from the guestbook in the Sheppard Gallery in the University of Nevada, Reno (1991).

Even without reading the additional texts that comprise the *Bravo 20* publication, there was no mistaking Misrach's political affiliation to the anti-military activists he was associated with. Reading negative comments such as the one written by Tom Paul in the *Bravo 20* guestbook (Fig. 18), it is interesting to note that Paul's objection to what he defines as 'snivelling, leftist, enviro babble', is focused upon one photograph in particular, an image which Misrach has titled *Dead Fish* (Fig. 19). In her account in 'The Story', MW Misrach describes how in the summer of 1984 the vicinity of the Bravo 20 site had flooded (a phenomenon that occurs once every 10-15 years), and as a result, the bombardment zone became populated by some '7 million fish' (MW Misrach, 1990: 23). As the floodwater evaporated and receded, the fish were left stranded and died en masse.

In one sense, Tom Paul's objection that the military had no involvement in the killing of the fish is correct – *Dead Fish* represents a natural phenomenon. Upon closer reading, however, the incident of the dead fish becomes more ambiguous. In 'The Story', MW Misrach cites an environmental report published by the US Fish and Wildlife Service, which expresses concern that the flooding of Bravo 20 could have washed the toxins

present in localised areas of the bombardment zone into the floodwaters, with potentially devastating environmental consequences (Misrach, 1990: 23). Whilst undoubtedly the fish overwhelmingly died as a result of the lack of H<sub>2</sub>O, as Tom Paul claims, toxicological examinations also reveal the presence of unaccountably high levels of chromium in the fish carcasses. The theory that the fish ingested high levels of toxic substances is further substantiated by evidence of physical abnormalities discovered in birds, who fed upon the fish, and died soon after the flood waters receded (US Fish and Wildlife Service, cited in MW Misrach, 1990: 23).



Fig. 19. Richard Misrach, *Dead Fish* (1990).

The ambiguity of *Dead Fish* – does the photograph show a natural phenomenon, a man-made tragedy, or both? – underscores the complexity of the issues at play within *Bravo 20* as a whole. Roland Barthes' observation in *Camera Lucida* that 'Photography

never lies: or rather, it can lie as to the nature of a thing, being by nature tendentious, never as to its existence' (Barthes, 2000: 87) is exemplified by *Dead Fish*. Undeniably the fish *are* dead; in this instance no one is disputing the authenticity of the photograph. Nor is there anything accusatory about Misrach's caption, which is almost comically banal in its matter-of-factness. Yet it is obvious from the comments he made that Tom Paul felt Misrach tendentiously used the emotive image of dead fish strewn across the desert basin in a cynical attempt to influence the audience into sympathising with his political objectives.

Importantly, Tom Paul's allusion to the possibility of a chemical spillage by the US Navy suggests that his objection to what *Dead Fish* depicts actually derives from knowledge garnered from an additional text, perhaps written by MW Misrach, which is extraneous to both the photograph and the caption. It therefore follows that Tom Paul's criticism is not aimed directly at the photograph that is *Dead Fish* but at how the polysemous meaning of the photograph is anchored by what Roland Barthes would describe as the 'repressive value' (Barthes, 1977: 40) of a text, which selects or amplifies some signifieds of the photograph at the expense of others. In this way, the rhetoric of this extraneous text directs the audience to a particular interpretation of the image, which may be at odds with alternative readings of the image that might occur in the absence of such a text. For this reason, Barthes quite obviously suggests that the accompaniment of text with image is 'ideological' (ibid.), in so far as it imposes a politics upon the image. In this instance, Tom Paul reacts angrily to the idea that *Dead Fish* documents the effects of military pollution, as opposed to the infrequent event of the Nevadan basin flooding, and the floodwaters subsequently receding.

The issue of the photographer as propagandist is taken up by Jussim & Lindquist-Cock (Jussim & Lindquist-Cock, 1985), when they discuss Jacques Ellul's categories of 'pre-propaganda' and 'active propaganda' (Ellul, 1973). Importantly, the context of Jussim & Lindquist-Cock's publication specifically refers to the photobook and to a genre of photography, which they would typically define as 'landscape photography'. It is important



to recognise from the outset that what Jussim & Lindquist-Cock do not examine, is the role that photography has historically played in depicting individuals for the purposes of generating party political propaganda.



Fig. 20. Lewis Baltz, *Park City #52*, (1979).

In an effort to outline their terms, Ellul's concept of 'pre-propaganda' is invoked by Jussim & Lindquist-Cock in order to describe a style of photography that 'does not have a precise ideological objective; it has nothing to do with an opinion, an idea, a doctrine. It proceeds [...] by the creation of feelings or stereotypes' (Ellul, 1973: 31). By comparison, 'active propaganda' is defined as being primarily aimed at 'modifying [the] opinions and attitudes' (Ellul, 1973: 31) of the audience. From the outset, Jussim & Lindquist-Cock's definition of pre-propaganda is highly problematic, because it ignores Barthes' observations concerning how signifieds within an image connote ideological (Barthes, 1977: 49) meanings to spectators from specific cultural standpoints using the very same mechanisms that Jussim & Lindquist-Cock attribute to the concept of pre-propaganda. Nevertheless, even though the binaries of pre- and active- propaganda are highly

controversial, Jussim & Lindquist-Cock's discourse warrants further analysis because of what the pair have to say about the function of text in directing the audience to a political understanding of the photograph.

By way of example, Jussim & Lindquist-Cock argue that Lewis Baltz's *Park City* (Baltz, 1980) constitutes an example of pre-propaganda, because it functions as a 'searing indictment' (Jussim & Lindquist-Cock, 1985: 146) of the reckless capitalist developments that proliferated on the Colorado scrubland in the latter half of the 20<sup>th</sup> century, destroying a fragile prairie ecosystem. Having made this affirmative statement, Jussim & Lindquist-Cock then problematise their position by cautioning that their interpretation of Baltz's photographs is conditional upon their pre-existent political beliefs, which are inclined towards environmentalism. As a result, Jussim & Lindquist-Cock argue that showing Baltz's images to a capitalist land developer might elicit a totally different response – these individuals might see Baltz's photographs of a bankrupt building programme as a potential investment opportunity, and detect no evidence of a critical approach to the *Park City* development (Fig. 20). At the heart of Jussim & Lindquist-Cock argument, is the classification of Baltz's *Park City* as pre-propaganda because the publication does not overtly state a political position with regards to the environmental or societal implications of building in the Colorado scrubland:

[...] no action is requested. There are no Sierra Club or Audubon Society membership blanks. The book arouses outrage, grief, amazement, despair; but even the Blaisdell text, which is deeply philosophical, does not point to a particular remedy [...] What action does Baltz and Blaisdell require or suggest? (Jussim & Lindquist-Cock, 1985: 146-7)

The interesting point about Jussim & Lindquist-Cock's text is that whilst the duo acknowledge that Baltz's photographs do succeed in arousing within some individuals strong negative emotions – grief, despair, outrage etc. – they argue that Baltz's photographs, in the absence of supporting texts, are unable to communicate a cogent

political message. As a result, their criticisms of *Park City* are concentrated on the lack of rhetoric evinced by Blaisdell's introductory essay, and by the absence of further texts, which could either direct the reader towards conservationist organisations, or petition the reader to take forms of direct action. This observation lead Jussim & Lindquist-Cock to conclude that whilst 'photographs can operate on the level of pre-propaganda, it requires words – directions for action, as it were – to produce action' (Jussim & Lindquist-Cock, 1985: 147).



Fig. 21. Michael Schmidt, *Untitled (1)*, from *Lebensmittel*, (2006-2010).

If Misrach's *Bravo 20* is an example of a photobook which relies upon the existence of additional texts in order to anchor the photographs into a politicised discourse, then it is necessary to consider an example of a publication which eschews language altogether, and attempts to tackle a politicised subject purely through the use of photography. Photobooks that do not rely upon any supporting texts – introductory essays, captions, interviews,

section headings etc. – are relatively uncommon. In recent years, perhaps the most striking example of a photobook that contains only photographs is Michael Schmidt's *Lebensmittel* (2012). In English, the term 'lebensmittel' means 'food', and Schmidt's publication represents an attempt to examine a heavily politicised subject – the German food industry – without using any extraneous texts.

Photographed over the period of four years, Schmidt's images are sometimes displayed in the grid format (Fig. 21) reminiscent of Bernd and Hilla Becher's approach to installation. Schmidt's use of the grid suggests that although the aesthetic properties of the photographs are often at variance – the photographs alter dramatically in both scale, content, and the use of black and white or colour reproduction – the images when taken as a whole can be regarded as conforming to a singular typology. Considered as a singular entity, Schmidt's photographs share the rectangular format of the 35mm camera system, with the majority being black and white, interspersed occasionally by close-up images shot with the punchy colours typical of flash photography.

In the process of viewing *Lebensmittel*, a number of narrative concerns within the photographs are suggested by the repetition of core themes within the series. On several occasions agricultural labourers, who appear to be migrant workers, are documented harvesting fruit or vegetables and working within packing factories. Schmidt's critique of the intensive nature of food production is further emphasised by a series of views that document the heavily industrialised landscape of contemporary food production. Schmidt's photographs depict the vastness of greenhouse complexes that look like modernist industrial buildings, and he emphasises the ubiquity of petrochemical products by documenting fields festooned with polythene and fruit encased within a nest of polystyrene. On the rare occasions when text is present within individual photographs, i.e. on food packaging, it performs a graphic function, and Schmidt is careful that the texts do not coalesce into a discernible meaning for the audience.

Schmidt's *Lebensmittel* can therefore be understood as an example of 'serial art'. Writing about the concept of serial art in the context of The New Topographers, Greg Foster-Rice argues that 'serial work is always multiple [...] unification is not through the continued exploration of an expressive or thematic model but adherence to a system whose rules are given at the outset' (Foster-Rice, 2010: 61). In the case of *Lebensmittel* the theme of German food production provides the basis for a range of images, which are treated equally without the imposition of hierarchies (ibid.). Sol Le Witt, one of the early conceptual artists to use a serial approach, defines his communicative intentions when he comments: 'The aim of the artist would not be to instruct the viewer but to give him information. Whether the viewer understands this information is incidental' (Le Witt, 1967, cited in Osborne, 2013: 63).

Michael Schmidt's *Lebensmittel* falls firmly into Sol Le Witt's conceptual approach to artistic production. Schmidt's photographs can be described as syntagms that connote a critical attitude towards intensive food production because the images do not evince any of the aesthetic qualities associated with the conventions of advertising – the photographer's use of flash lighting is stark and stands in opposition to the soft and evenly illuminated imagery commonly found in product photography. Beyond this initial subtractive reading of the Schmidt's photographs the audience is left to question Schmidt's ethical motivations for constructing the series. If Schmidt's photograph of mincemeat is taken as an example (Fig.22), without the presence of text to anchor meaning in the image, it becomes difficult to establish the dominant signifieds of the photograph. In the absence of the denominative function of text, Schmidt's mincemeat can be read in any number of ways: Is Schmidt openly critical of how meat is produced in Germany, and if so does he advocate that the audience become vegetarians? Is it possible to discern an ecological subtext in Schmidt's series? Schmidt's work opens up a place for dialogue in the minds of the audience concerning such pertinent questions but in the absence of accompanying rhetoric the artist's political intentions remain obscure.





Fig. 22. Michael Schmidt, *Untitled (2)*, from *Lebensmittel*, (2006-2010).

In their exposition of what constitutes effective visual information advocacy, the purpose of which is to ‘change things from how they are to how they ought to be’ (Tactical Technology Collective, 2014: 21), the TTC ask a pertinent question: ‘How apparent is the framing of the information to the viewer? And to what degree does the viewer feel *forced* [my emphasis] by this to reach a certain conclusion?’ (Id.: 9). The absence of text or any additional modal forms in Michael Schmidt’s *Lebensmittel*, results in a series of photographs that are polysemous in the broadest sense of the term. Whilst Schmidt does frame the socio-political and economic realities of contemporary German food production as a thoroughgoing capitalist enterprise, without ‘words – directions for action, as it were – to produce action’ (Jussim & Lindquist-Cock, 1985: 147) Schmidt’s series stops short of providing an explicit political commentary.

According to the Tactical Technology Collective, the key quality of a visual information advocacy document, which is designed to promote a specific political objective, is one in which modal forms help the audience to ‘Get the Idea’ (Tactical Technology Collective, 2014: 50). Most commonly, visual cues enable the audience to discover further

information about a contentious issue by using emotive triggers such as ‘shock, humour, subversion and metaphor, [which] have the effect of challenging the viewer, attempting to create a pivot for their opinions and ultimately their actions’ (ibid.). In the example of Richard Misrach’s *Bravo 20*, the application of ‘shock, humour, subversion and metaphor’ (Tactical Technology Collective, 2014: 50) exist outside of the photograph in the supporting texts contained within the publication – most notably in MW Misrach’s opening essay and in Misrach’s caustic ‘National Park: A proposal’.

In the case of *Lebensmittel*, the absence of supporting information ensures that Schmidt’s photographs cannot be considered a form of ‘active propaganda’ (Ellul, 1973: 31) because Schmidt’s adherence to seriality as a means of display, combined with the absence of captions, supporting essays, narrative research, statistics, food labels, infographs, or any other form of scientific research, ensures that his typologies do not direct the audience to a precise ideological objective understanding of the politics or ethics of contemporary food production in Germany. It is therefore my contention that the photograph *alone* cannot provide a cogent political argument, which can be applied in an advocacy process. To this end, if the photographer wishes to pursue a form of practice, which can be allied to activism, the photograph must be situated within a larger inter-textual multi-modal context, as is the case with Richard Misrach’s *Bravo 20* publication.

## 2:6 Conclusion

In my analysis of Misrach's *Bravo 20*, I have claimed that Misrach provides a model of photographic practice in which the photographer is embedded within activist networks, and has an important role to play in raising the profile of the activists' struggle through the documentation of the polluted topography. I consider *Bravo 20* to be a significant publication, because it begins to explore the possibilities associated with using the medium of the photobook for the purposes of conducting environmental activism on a collaborative basis. On the other hand, I argue that Misrach's inability to consider 'National Park: A proposal' as a credible means of confronting and embarrassing the representatives of congress for their failure to hold the US Navy's illegal bombing campaign to account, whilst also presiding over the administration of the national parks, represents a failed opportunity to use the photobook for the purposes of political praxis.

In my use of Barthes' concepts of 'anchor and relay' (Barthes, 1977: 32-51), I claim that Misrach's photographs benefit from being situated in a multimodal context within *Bravo 20*, because the presence of additional texts anchors meaning to the photographs. By using Jussim & Lindquist-Cock's (1985) little-known categories of pre- and active-propaganda, I argue that *Bravo 20* falls short of being an example of active propaganda; however, I concur with Jussim & Lindquist-Cock's assertion that in order for a body of photographs to be considered as propaganda, words are required in order to provide a cogent direction for action. This is not to say that the photograph provides a secondary role to text. As the comments of Tom Paul in the guestbook of the *Bravo 20* exhibition demonstrate, the indexical qualities of the photograph serve to provide a locus for debate concerning environmental issues, which takes as its starting point an encounter with the photograph as a highly contested form of 'evidence'. My analysis of the *Bravo 20* photobook therefore provides a starting point for the development and dissemination of my practice in the photobook format, which I shall discuss in the chapters that follow.

## Chapter 3: An Ethical Photographic Practice

### 3:1 Introduction

In this chapter, I address how aesthetics can be used in order to construct a photographic practice, which I argue is commensurate with the values of environmental activism. I begin my evaluation of my practice by considering the role that beauty plays in photographs of industrial pollution. Using Kant's Transcendental Aesthetic as a basis for my argument, I discuss how representations of environmental despoliation can also manifest the quality of beauty. I borrow Mark Cousins' (2009) argument concerning the relationship between dirt and ugliness to argue that my photographs concern 'the ugly subject matter' of industrial pollution. By combining Cousins' commentary on the spatial voracity of dirt with Kant's observations on the aesthetic, I argue that beauty and 'the ugly subject' of pollution can co-exist in the same image because they represent differing criteria of judgement. As such, beauty and the existence of the 'ugly' are not relativistic to one another.

In this chapter, I attempt to answer my first research question – What are the ethical implications of photographing industrial pollution? – by making two claims. The first concerns my perspectival approach to the polluted topography, which represents an attempt to develop a counter-aesthetic to the raised ocular perspective of the sublime. In opposition to the sublime, I make a case for the immediate and first-hand documentation of the polluted topography, which I describe as 'the activist's perspective'. In the discussions that follow, I provide examples of this alternative compositional viewpoint but I also admit to having difficulties in consistently maintaining this perspectival approach.

My second attempt at making a claim for an ethical photographic practice involves departing from a discussion centred upon the aesthetics of the photograph, in order to

discuss the placement of the photographic image into a multimodal framework of texts. Using the photobook as my preferred medium for dissemination, I argue that by situating the image within a multimodal context I can provide the audience with an awareness of the ecological and sociological contexts surrounding the locations documented. I argue that my duty to ‘inform the audience’ about the environmental problems existent in the locations documented is an ethical obligation, which defines my practice as an artist.

### **3:2 Beauty and the Ugly Subject**

In his meditations in the *Critique of the Power of Judgement*, Kant’s discussions on what constitutes ‘the ugly’ are extremely limited. In the latter passages of the treatise, Kant offers only the briefest of commentaries on the concept of ugliness in art when he argues that one of the characteristics attributable to art is its capacity to describe ‘beautifully things that in nature would be ugly or displeasing. The furies, diseases, devastations of war, and the like [...]’ (Kant, 2000: 190) On one level, Kant’s observation is obvious – namely that art allows us to meditate upon difficult subject matter such as conflict, which in a real life scenario would be too terrifying to dwell upon. Upon closer examination, however, Kant’s comments prove to be problematic. Whilst it is clear that phenomena such as war, disease and disaster are clearly ‘displeasing’ occurrences, Kant’s use of the term ‘ugly’ sits awkwardly within his passage because the word lacks a clear conceptual definition. Within the context of Kant’s sentence the opposite of ugliness would appear to be peacefulness, tranquillity, health and vitality. Clearly, Kant uses the term ‘ugly’ to describe occurrences that offend our sensibilities in some way because they are antagonistic to our innate sense of wellbeing.

What ugliness does not refer to in Kant’s description are the aesthetic qualities of the art object itself. This is because Kant’s notion of beauty is a pure and ‘ideal’ quality (Kant,

2000: 116-20), which he argues is born from the human imagination and a striving to realise perfection in the forms of everyday experience. In Kant's commentaries, ugliness and beauty are *not* described as comparable and relativistic qualities i.e. to be beautiful means 'to be lovelier than' and to be ugly means 'to be less lovely than'. Instead, Kant eschews the possibility of discussing ugliness as an aesthetic concept by drawing a categorical distinction between the pure aesthetic judgement of beauty in art and what could be termed as 'the ugly subject matter' pertaining to a given art object.

It is important to stress at this juncture that Kant's commentaries on the nature of the ugly subject are centred upon artworks that depict human suffering and pain but at no point does Kant refer to environmental despoliation when the human subject is absent. Nevertheless, in Kant's discussions on the aesthetic Kant stipulates that 'nature' is the pre-eminent source of beauty (Kant, 2000: 179) from which artistic representations are dependent, in both their inspiration and form. Furthermore, Kant argues that the act of meditating upon the beauty of 'nature' is one that is congruent with positive moral behaviour: '[...] he who takes such an interest in the beautiful in nature can do so only insofar as he has already firmly established his interest in the morally good' (Kant, 2000: 180).

Whilst it is beyond the scope of this thesis to address wider questions concerning the nature of morality, Kant's observations allow for the possibility of comparing the act of gazing upon the despoliation of 'nature' with that of contemplating human suffering. In each case, the subject matter represents a calamitous occurrence, which perturbs and unsettles the onlooker. I would therefore argue that artistic images that show the despoliation of the natural environment constitute the existence of the Kantian 'ugly subject' in a manner that is similar to the depiction of conflict within the social sphere. However, as Kant reminds us, art is a paradoxical medium because it has the capacity to render 'the ugly subject' in a manner that nevertheless manages to evoke the feelings of



pleasure, which are associated with encountering beauty.

In a recent retrospective of Baltz's *Park City* project, staged during 2012 by Gallery Luisotti (who represent Baltz in the USA), the gallery published a press release commenting on the aesthetic properties of Baltz's series. Of significance is Luisotti's appraisal that: 'Nature as a source of aesthetic pleasure is rendered out in these photographs' (Luisotti, 2013). Taking Luisotti's comments into consideration, it is therefore important to question what qualities are active in Baltz's photographs if 'nature', the pre-eminent source of aesthetic pleasure according to Kant, is absent.



Fig. 23. Lewis Baltz, *Park City 37. Park Meadows, Subdivision 3, Lot 39, Looking Northwest*, (1979).

In *Park City 37. Park Meadows, Subdivision 3, Lot 39, Looking Northwest*, 1979 (Fig.23), Baltz directs his camera at a small mound of earth, sand or cement, that has been left freshly disturbed on the surface of the Colorado scrubland. In the foreground, the presence of earth-moving machinery is suggested by vehicle tracks, which lead into a mound of unidentified materials, most probably sand, cement or other substances

commonly used in the construction industry. The mound provides a rich gradation of tones, which run contrary to the prevailing direction of the slope. On the horizon line of the image, the Colorado scrubland remains undisturbed, indicating that ‘nature’ has not been totally rendered out, as Luisotti suggests, but nevertheless it is relegated to the very limits of the frame.



Fig. 24. Conohar Scott, *Almásfüzitő Plate 7*, Diptych: right panel, (2012).

In *Almásfüzitő Plate 7* (Fig. 24), the subject of the photograph concerns similar mounds of earth to that of Baltz's *Park City 37. Park Meadows, Subdivision 3, Lot 39, Looking Northwest, 1979* (Fig.23). In the case of Baltz's image, Baltz's decision to use black and white film partially obscures the identity of the substances photographed, and as a result the audience is forced to question what the photographer is directing their attention to. Comparatively, in *Almásfüzitő Plate 7* (Fig. 24) whilst the identity of the coloured substances leaching from the prisms is also unknown, the rich plum hues of the secondary prism and the striking orange leachate visible in the sedentary water in the foreground hint at the presence of inorganic pollutants, which signify the presence of ‘nature’ perturbed.



A concern shared by *Almásfüzitő Plate 7* and Baltz's *Park City 37* lies in the identity of the materials found within the mounds; in both examples, the presence of unknown substances signify that the soil has been sullied by their introduction. The subject matter of both photographs can therefore be described as a landscape of slag heaps, tailings and sludgy deposits; typical of waste ground and other nugatory spaces, wherein the aesthetic pleasure found in the contemplation of 'nature' is absent. As such, it is fair to say that the subject matter of *Almásfüzitő Plate 7* and Baltz's photograph concerns the existence of 'the ugly subject', which in this instance is the despoliation of 'nature'.

According to the anthropologist Mary Douglas, the concept of 'dirt' or detritus can be understood as 'the by-product of a systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements' (Douglas, 2002: 36). Commenting on the material properties of 'dirt', Mark Cousins echoes Mary Douglas's argument by commenting that, 'What makes dirt dirty is not its substantial form [...] but the fact that it is in the wrong place' (Cousins, 2009: 147). For Cousins, the dirtiness of dirt is not explained by a substance's inherent physical qualities, but by the experience of confronting an object '*as being there and as something that should not be there*' (Cousins, 2009: 147).

Significantly, Cousins situates Mary Douglas's concept of dirt as a form of social taboo within the frame of an aesthetic debate, by arguing that the experience of encountering objects, which occur out of place and in disproportionate quantities, constitutes an encounter with what he terms as 'the ugly':

An economy of dirt is therefore one way of opening up the question of ugliness [...] In so far as dirt is matter out of place it must have passed a boundary, limit or threshold into a space where it should not be. The dirt is an ugly deduction from 'good' space, not simply by virtue of occupying space, but by threatening to contaminate all the good space around it. In this light, 'dirt', the ugly object, has a spatial power quite lacking in the beautiful object (Cousins, 2009: 148).

If *Almásfűzitő* Plate 7 and Baltz's *Park City* 37. *Park Meadows, Subdivision 3, Lot 39, Looking Northwest, 1979*, can be interpreted using Cousins' notion of dirt as an expression of 'ugliness', the landscape of prisms in the foreground of each photograph can be understood as exhibiting a spatial voracity, in so far as the mounds threaten to spill out and engulf the remaining flora and fauna located on the horizon line. The inclusion of what Cousins terms as the 'good space' of 'nature', found at the limits of the frame on the horizon line, therefore provides an important counterbalance to the dirty or 'ugly' space, which predominates the composition. It is precisely this interplay between the 'ugliness' of dirt and the beauty of 'nature', which creates a sense of dynamism in both photographs.

Cousins' observations concerning the spatial power of ugliness therefore provides one explanation in answer to Luisotti's question of how photographs, which are overwhelmingly devoid of 'nature', appear nevertheless to provoke the desire to linger further. Whereas Kant describes the capacity of art to illustrate beautifully 'the ugly subject' matter of suffering and violence, due to the skill of the artist in rendering what is ugly beautifully, Cousins suggests that it is the spatial characteristics of the ugly thing itself, which provokes a fascination in the minds of the audience and provokes the desire to linger further. Cousins therefore affirms that there is more than one dynamic quality at play in the consideration of the art object – the presence of the aesthetic *and* the spatial voracity of the ugly subject both provoke fascination and attraction but for fundamentally different reasons.

Returning once more to Kant's observation concerning the capacity of art to illustrate 'beautifully things that in nature would be ugly or displeasing' (Kant, 2000: 190), it is interesting to consider if a photograph of environmental despoliation can simultaneously evoke the quality of beauty. In a photograph such as *Bull Bay* (Fig. 25), which forms part of the *Mynydd Parys & Afon Goch* project, the richly coloured striations of the rocks normally submerged in the tidal estuary of Bull Bay, except at low tide, exhibit

the verdant green of sea moss and lichen. The rocks are also striking because the green vegetation is interspersed by the presence of highly toxic orange leachate, which has stained the rocks after many years of repeated outflow into the Irish Sea. Arguably, *Bull Bay* exhibits a number of aesthetic qualities that could be described as beautiful; the rainbow-like colours of the mineral rich leachate are attractive in the same way that colourations in rock formations or the structure of flora are beautiful to behold in ‘nature’. Furthermore, the soft qualities of the river’s outflow, a result of using a one second exposure time when creating the photograph, introduces a pleasing textural juxtaposition when it is set against the sharp vertical patterns of the hard volcanic rock.



Fig. 25. Conohar Scott for Environmental Resistance, *Bull Bay, Mynydd Parys & Afon Goch* (2014).

The fact that *Bull Bay* exhibits the qualities of beauty found in ‘nature’, even though the photograph depicts an eco-toxic scene, supports Kant’s concept of a ‘disinterested’ beauty (Kant, 2000: 91), which appeals to our senses without an understanding of what the object of beauty represents. As such, *Bull Bay* provides an example of art’s capacity to render the existence of the ugly subject in a manner that is beautiful. This is because *Bull Bay* exhibits the positive aesthetic qualities of ‘nature’ – rocks, lichen, water etc., –which Kant extols in his description of ‘nature’ as a pre-eminent source of beauty (Kant, 2000: 179). However, the fact that these natural objects are suffused in a toxic film calls into question Kant’s notion that the appreciation of natural forms is an activity that corresponds to an innate sense of moral goodness. Arguably, the ‘disinterested’ qualities associated with the appreciation of beauty can lead the audience into an unwitting attraction towards the ‘ugly subject’ of pollution. By such means, the image’s capacity to render environmental despoliation as beautiful can lead to uncertainty regarding the audience’s capacity to exercise ethical judgements in the contemplation of the art object.

The uncertainty surrounding what is denoted by a photograph of industrial pollution – does the image convey the beauty of ‘nature’ or the existence of ‘the ugly subject’? – finds its most profound expression in the consideration of photographs depicting pollutants, which are invisible not only to the naked eye but also to the camera lens. In the case of John Darwell’s (2001) photographs of the Chernobyl Exclusion Zone <sup>22</sup>, which focus on the legacy of the Chernobyl nuclear disaster (26<sup>th</sup> April 1986), there are no visible indications that could suggest the presence of the harmful radionuclides capable of producing abnormalities, suffering and death in the bodies of animals and humans alike (Fig.26). The phenomenon of radioactive pollution provides a reminder that the existence of ‘the ugly subject’ of environmental despoliation is often conditioned by language, or additional modal forms, which act in concert with the image. Interpreted solely from a Kantian point

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<sup>22</sup> The Chernobyl Exclusion Zone is a concentric series of circular boundaries located at intervals from the stricken Reactor 4, where the nuclear meltdown occurred. There is an outer 30km zone, an inner 10km zone and a further restricted area around the abandoned city of Pripyat, which is home to the reactor. Habitation is officially banned within the Exclusion Zone and access is controlled via entry checkpoints (Darwell, 2001).



of view, in which depictions of ‘nature’ are venerated for their aesthetic qualities, there is no possibility of understanding that Darwell’s *Karagod, One of seventy abandoned villages in the zone* (Fig. 26) actually documents unseen radioactive particles, which could be actively exerting genetic and tissue abnormalities upon the flora and fauna existent within the frame of the image.



Fig. 26. John Darwell, *Karagod, One of seventy abandoned villages in the zone*, taken from *Legacy: Photographs Inside the Chernobyl Exclusion Zone* (2001).

Images of radioactive nuclear fallout zones, such as Darwell’s photographs of the Chernobyl disaster introduce a whole new level of conceptual difficulty into our understanding of visualising industrial pollution. Such photographs can never ‘document’ pollution in the evidential sense of the term. Instead, meaning in Darwell’s photograph is dependent upon our collective cultural understanding and imagination i.e. we have an awareness of the Chernobyl incident and we must trust that what we see is actually a depiction of the Exclusion Zone. Darwell’s photographs therefore provide an illustration of the epistemological gap that exists between Kant’s notion of a ‘disinterested’ (Kant, 2000:

91) beauty, and the apparent toxicity of a given place, which constitutes the existence of the ‘the ugly subject’, which is industrial pollution.

### 3:3 The Activist’s Perspective

Commenting on Edward Burtynsky’s photograph *Mines #22 Kennecott Copper Mine, Bingham Valley, Utah 1983* (Fig. 13), Joshua Schuster (2013) argues that the colossal vista required in order to create the effect of the industrial sublime serves only to create a barrier between the audience and the subject matter. Schuster’s criticism of the industrial sublime lies in his observation that the viewer is frozen into a position of distant passivity (Schuster, 2013: 201), from which they can only view the scene at Kennecott Copper Mine as a form of spectacle, whilst extraction at the mine continues unabated. Schuster’s observation leads him to conclude that the sublime necessitates ‘an uneasy relationship with forms of hands-on environmentalist activism’ (Schuster, 2013: 194).



Fig. 27. Conohar Scott, *Almásfűzitő Plate 3*, Diptych: right panel, (2012).

Although Schuster does not elaborate further upon what he means by the phrase ‘hands-on environmentalist activism’, I argue that Schuster is referring to the propensity of environmental activists to enter locations for the purposes of gathering various forms of scientific and indexical ‘evidence’, which might indicate malpractice on behalf of a company or support a larger case for remediating the environment – when conducting surveys of this nature, it is not uncommon for activists to take mineral samples from leachate found in low-lying areas or watercourses, in order to provide a cogent basis for the remediation of the polluted topography.

By maintaining a close spatial identification with the site, I was able to document a variety of coloured toxins (Fig. 27), which supported my hypothesis that the compounds TATAI were blending into the prisms were not biodegrading, but were instead leaching into The Danube. At the point of entering into the prisms at Pond 7, I was following in the wake of other Greenpeace activists who had previously infiltrated the site with the intention of taking mineral samples of leachate (see Appendix *ii*). If the ‘Clinch’ photographs were composed with little regard for the image’s pictorial or technical qualities, then my approach to documenting Pond 7 can be described as an attempt to maintain the immediacy of the ‘Clinch’ photographs, whilst re-introducing a degree of pictorial sophistry into the compositional design of the imagery. My justification for this decision largely arises from awareness that I would not instinctively frame the subject as ‘Clinch’ does, and that it was important to remain true to myself when photographing on location.

In the majority of images that comprise *Almásfűzitő: An Index*, the horizon line is located at one-thirds distance from the top of the frame, with key compositional elements placed in the middle third, leaving the textured foreground occupying the lower section of the frame. Graduated Neutral Density (ND) filters were used on the sky in order to render detail in the clouds, which had the effect of reducing the exposure difference between the sky and the dark mud of the prisms. Colours, whilst not artificially exaggerated in the

digital editing of the file, were reproduced as vivid and punchy against the neutral backdrop of the grey sky. In the editing process, my intention was to create photographs that reproduced the toxins present on location with accuracy and vividness, whilst allowing other compositional elements to remain as unobtrusive as possible. If throughout the series the sky remained universally grey, or the horizon line was predictable, the audience was obliged to focus on the intended subject matter of the photographs – the leachate visible at close quarters.

Although the ‘Clinch’ photographs have a tendency to be more expansive, the scale of the photographs of *Almásfűzitő: An Index* is commensurate with how an individual standing on the ground would view the scene. This first-person perspectival viewpoint represents an opposing visual strategy to Burtynsky’s industrial sublime. Writing in the accompanying essay to Burtynsky’s *Oil* (2009), Paul Roth likens Burtynsky’s raised ocular perspective to the vantage point of an ‘impassive bird, flying invisibly overhead, surveying the world with stately reserve’ (Roth, 2009: 167). The prevailing sense of power and detachment that comes from the industrial sublime allows for a reading of Burtynsky’s photographs as signifying a power of a panoptic gaze, that seeks to ‘subordinate [both] social and natural worlds’ (Cosgrove, 2003: 3). Schuster is therefore correct in observing that the perspective of the industrial sublime privileges ‘a certain type of viewer’ (Schuster, 2013: 194) – one who is not immediately affected by pollution. I argue that this viewer is represented by the figure of the capitalist prospector. I therefore argue that the connotations and power dynamics signified by the industrial sublime are incompatible with the ethical values of environmentalism.

In an attempt to discover a mode of photographic practice, which is ethically commensurate with an ecological approach to the landscape, I took Schuster’s observation concerning the uneasy relationship that exists between the sublime and ‘hands-on environmentalist activism’ (Schuster, 2013: 194) and used it to develop a methodological



approach to my photographic practice. The result was my concept of ‘the activist’s perspective’. ‘The activist’s perspective’ opposes the main tenets of the industrial sublime by refusing to take a raised ocular perspective or exert a sense of power and dominance over the topography. ‘The activist’s perspective’ emphasises a sense of equanimity with ecosystems by requiring the photographer to infiltrate zones of pollution, observe the ecosystem at close quarters, record, and bear witness to the effects of pollution. ‘The activist’s perspective’ requires that the photographer be a participant in the experience of encountering industrial pollution, not a distant spectator.

My justification for ‘the activist’s perspective’ emerges from a realisation that the activist agency of the photographer is subsequently conveyed to the audience through the perspectival and compositional qualities of the resulting photographs. Through a close identification with the polluted topography, I argue that the ecological implications of industrial pollution become nascent to the audience in a manner that is distinct from the spectacle of perspectival dominance and emotive detachment afforded by the aesthetic of the ‘industrial sublime’.

In the case of *Almásfüzitő: An Index*, maintaining close spatial proximity to the subject matter of industrial pollution was an inevitable consequence of the intimate nature of the prisms. Entering into Almásfüzitő Pond 7, my activities closely mirrored that of the Greenpeace activists who had previously skirted the pond on the Danube’s edge, in order to collect mineral samples for analysis. Upon entering the prisms, I took up the role of an activist photographer, as Michelle Bogre would define the term, as ‘an engaged citizen with a camera’ (Bogre, 2012: xii) who was determined to expose the illegal waste processing operations being undertaken by TATAI (see ‘Appendix ii’).

It was not until I documented the abandoned copper mine of Mynydd Parys that my commitment to photographing in close proximity to the terrain was put to the test. The shift in scale to a large subject such as the open cast pit at Mynydd Parys ensured that I lost

the feeling of intimacy, which was so much a characteristic of the *Almásfűzitő: An Index* series. My decision to produce the *Mynydd Parys & Afon Goch* project in portrait orientation came with the realisation that I could document the Afon Goch Amlwch River in greater detail whilst retaining an overview of the surrounding landscape if I departed from the traditional landscape format. The concept I decided upon relied on photographing vertical slivers of the land (Fig. 28), which placed a shared emphasis on the foreground, middle-ground and horizon line. Whilst I was able to move closer to the face of the mine shooting vertically, the resulting images unfortunately do succeed in keeping the audience in a state of distant passivity from the subject, rather like Joshua Schuster's descriptions of Burtynsky's 'industrial sublime' (Schuster, 2013: 201).



Fig. 28. Conohar Scott for Environmental Resistance, *untitled, Mynydd Parys & Afon Goch* (2014).

Aware that I was losing my justification for ‘the activist’s perspective when shooting at Mynydd Parys, I attempted to move closer to my subject as the series progressed. Rather like a vortex of water draining from a sink, my intention was to approach Mynydd Parys by circling around the perimeter of the open cast pit before gravitating toward the floor of the open cast, where the rainwater permeates through the floor of the pit and forms leachate in the subterranean tunnels beneath the surface. This leachate then emerges further down the mountain in the form of the Afon Goch Amlwch River. It was only at the point when I began to document the Afon Goch Amlwch River, and take mineral samples from the watercourse, that I was able to return to my objectives in regards to ‘the activist’s perspective’ – the last image in the series *Bull Bay* (Fig. 25.) is an example of a detailed and close-up documentation, which is indicative of ‘the activist’s perspective’ at work. The project *Mynydd Parys & Afon Goch* is therefore a combination of two stylistic approaches – initially I begin by flirting with the notion of the ‘industrial sublime’ before culminating in a return to ‘the activist’s perspective’. *Mynydd Parys & Afon Goch* indicates how difficult it is to photograph large subjects such as mines whilst adhering to ‘the activist’s perspective’, but it also suggests that in the context of a series of images, it is possible to provide a contextual overview of an expansive location before moving closer to document the effects of industrial pollution at a proximate scale.

### **3:4 The Informed Audience I**

One of the defining characteristics of Burtynsky’s industrial sublime is his reluctance to attribute captions, or any form of additional information, to his photographs. In part, Burtynsky’s unwillingness to provide supplementary information is symptomatic of his refusal to take an ethical stance in relation to his subject matter (Peeples, 2012: 385). In addition, Burtynsky’s predilection for creating spectacular views of mining operations such as the Kennecott Copper Mine (Fig. 13) means that ‘the massiveness of the production is

established through the photograph [whilst] the magnitude of the place's toxicity remains unknown' (Peeples, 2012: 384). Not only does Burtynsky's industrial sublime function by ensuring that the audience is kept at a distance from the environmental problems that are resident within the locations he photographs, as Schuster (2013) suggests, but in addition, the spectacle of the sublime offers no knowledge of the local communities or of the ecosystems that are part of, or adjacent to, the industrial complex.

According to the critic Rod Giblett, the industrial sublime can be understood as an aesthetic approach to the documentation of industrial pollution which preferences the emotional sensations of awe associated with the sublime over a commitment to inform the audience about the environmental impact of alterations in the locations documented. This observation leads Giblett to conclude that the industrial sublime effectively functions as 'a masking agent to hide the social and environmental realities of the sites' (Giblett, 2012: 93) photographed. In an attempt to develop further a counter-aesthetic strategy to the industrial sublime, I made an ethical commitment to situate the photograph into a multimodal assemblage of texts, so that these additional modal forms could 'anchor' (Barthes, 1977: 32-51) meaning into the image by providing the audience with a cogent awareness concerning the environmental problems existent within a given location.

In my claims for a multimodal approach to the documentation of industrial pollution, it is important to understand that my argument refers primarily to the printed form of the photobook, which provides a platform for organisation and distribution of various modes— captions, graphic design icons (with an emphasis on the iconography of Web 2.0), environmental science data, political manifestos, cartography, legal statutes, infographs and diagrammatic overlays— all of which can be employed in order to make the case for environmental remediation. The rationale for employing the medium of the self-published book as a disseminatory platform is expounded further in the following chapter (see section '4:3 A Postal Protest'). For the present argument it is sufficient to understand

that the expanded canvas of the photobook format, within which the photograph as a singular mode can be placed with other modal forms, allows for the possibility of designing a maximally persuasive message, which can be used for environmentalist objectives.

My inspiration for the concept of ‘the informed audience’ derives from Walter Benjamin’s assertion in *The Author as Producer* that the work of art must be ‘inserted into the context of living social relations’ (Benjamin, 1973: 87). According to Benjamin, the photograph’s propensity for representing the ugly subject matter of rubbish-heaps (environmental despoliation) or social depravation, in a manner that evokes only beauty must be resisted. Instead, Benjamin calls for the addition of captions to accompany the photographs, which serve to ‘confer upon it [the photograph] a revolutionary use value’ (Benjamin, 1973: 95). I therefore argue that the concept of ‘the informed audience’ can be understood as an example of what Benjamin advocates; by situating the photograph into an extended environmental context, the art work acquires an enhanced political function because the phenomena of industrial pollution is reified to the audience.

In my first photobook project: *Almásfűzitő: An Index*, my attempt at situating photography within a framework of knowledge took the form of a diptych display, with the left plate of the diptych pairing being constructed entirely of text. In developing the concept of the text plate, I took inspiration from J.A. Todd’s *View in Sutter County 36 miles below Marysville; where formerly existed the orchards of Mr. Briggs and Mr. Riggs (1883)* (Fig. 8). In particular, I was interested in how Todd’s already exhaustive title/caption, which connotes meaning to the photograph from the position of the velum or frame, could be extended further still. In creating the text plates for *Almásfűzitő: An Index* I wanted to see how far the concept of a caption could be developed, so that the caption not only ranged continuously from one image to the next throughout the entire series, but also took on a scale and mass that rivalled the counterpoising photographs.

If J.A. Todd’s image depended upon the existence of an extended caption to connote



meaning to the photograph, so that the image could function within a jurisprudential context, then the content of the text plates in *Almásfűzitő: An Index* was also intended to highlight legal irregularities on-going in this location. The body of text that constitutes the content of the extended captions was taken from a copy of a dubious licence that was granted to TATAI by the Hungarian Environmental Protection Authority. This licence has since been deemed by the EU Commission to be in contravention of EU law, but at the time, the legality of the licence was not in dispute (see Appendix ii). Although the licence was issued to TATAI in Hungarian, I was able to translate the document because the waste codes, which serve to identify what types of industrial waste TATAI was permitted to ‘compost’ are standardised across the EU.

02 03 WASTES FROM FRUIT, VEGETABLES, CEREALS, EDIBLE OILS, COCOA, COFFEE, TEA AND TOBACCO PREPARATION AND PROCESSING; CONSERVE PRODUCTION; YEAST AND YEAST EXTRACT PRODUCTION, MOLASSES PREPARATION AND FERMENTATION 02 03 01 sludges from washing, cleaning, peeling, centrifuging and separation 02 03 04 materials unsuitable for consumption or processing 02 03 05 sludges from on-site effluent treatment 02 03 99 wastes not otherwise specified 02 04 WASTES FROM SUGAR PROCESSING 02 04 01 soil from cleaning and washing beet 02 04 02 off-specification calcium carbonate 02 04 03 sludges from on-site effluent treatment 02 04 99 wastes not otherwise specified 02 05 WASTES FROM THE DAIRY PRODUCTS INDUSTRY 02 05 01 materials unsuitable for consumption or processing 02 05 02 sludges from on-site effluent treatment 02 05 99 wastes not otherwise specified 02 06 WASTES FROM THE BAKING AND CONFECTIONERY INDUSTRY 02 06 01 materials unsuitable for consumption or processing 02 06 02 wastes from preserving agents 02 06 03 sludges from on-site effluent treatment 02 06 99 waste not otherwise specified 02 07 WASTES FROM THE PRODUCTION OF ALCOHOLIC AND NON-ALCOHOLIC BEVERAGES (EXCEPT COFFEE, TEA AND COCOA) 02 07 01 wastes from washing, cleaning and mechanical reduction of raw materials 02 07 02 wastes from spirits distillation 02 07 03 wastes from chemical treatment 02 07 04 materials unsuitable for consumption or processing 02 07 05 sludges from on-site effluent treatment 02 07 99 waste not otherwise specified 03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD 03 01 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE 03 01 01 waste bark and cork 03 01 04\* sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances 03 01 05 sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04. 03 01 99 wastes not otherwise specified 03 03 WASTES FROM PULP, PAPER AND CARDBOARD PRODUCTION AND PROCESSING 03 03 01 waste bark and wood 03 03 02 green liquor sludge (from recovery of cooking liquor) 03 03 05 de-inking sludges from paper recycling 03 03 07 mechanically separated rejects from pulping of waste paper and cardboard 03 03 08 wastes from sorting of paper and cardboard destined for recycling 03 03 09 lime mud waste 03 03 10 fibre rejects, fibre, filler and coating-sludges from mechanical separation 03 03 11 sludges from on-site effluent treatment other than those mentioned in 03 03 10. 03 03 99 wastes not otherwise specified 04 WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES 04 01 WASTES FROM THE LEATHER AND FUR INDUSTRY 04 01 02 liming waste 04 01 04 tanning liquor containing chromium 04 01 05 tanning liquor free of chromium 04 01 06 sludges, in particular from on-site effluent treatment containing chromium 04 01 07 sludges, in particular from on-site effluent treatment free of chromium 04 01 99 wastes not otherwise specified

Fig. 29. Conohar Scott, text plate (Diptych L) *Almásfűzitő: An Index* (2012).

*Almásfűzitő: An Index* is memorable for its use of the diptych format, which creates a dynamic tension between the image and text across the spread of the photobook. The function of the photographs in the series was to indexically depict the workings of the

TATAI plant, on behalf of Greenpeace <sup>23</sup>, as this location had never been documented from the ground before. The purpose of the accompanying text plates was to name all of the organic and inorganic compounds that were being dumped into the alumina mud at Pond 7 (Fig. 29). Whilst the mirrored image of the text plate could never formally identify a particular pollutant depicted in a photograph, the extensive nature of the licence invited a speculative interaction with the photographs to occur. Instead of keeping the audience uninformed and at a spectator's distance from the polluted topography as Joshua Schuster suggests (Schuster, 2013: 201). *Almásfüzitő: An Index* therefore attempts to bring the audience close to the presence of toxins, and invites them to consider the identity and prevalence of the pollutants leaching from the prisms at Pond 7.

The extended captions or text plates are presented as a continuous stream of justified sans serif font. In the hierarchy of the textual layout, waste categories are denoted by bold uppercase type, whilst individual entries appear in standard lowercase, and the EU waste code numbers appear in grey, in order to break up the text and create a pattern within the rectangular frame. This variability of bold, standard and grey tones together with the white spaces in between the characters, combine to give the impression of 'rivers' in the text, which are intended to signify the on-going ecological danger posed by the leaching of chemicals through the unsealed basin of Almásfüzitő Pond 7. The challenge that *Almásfüzitő: An Index* offers to the reader is not the random nature of the text itself, but the banal bureaucratic language used to describe the industrial processes that constitute the licence. The repetitive and unrelenting nature of the codes inevitably leads to an abandonment of a conventional reading approach; instead, the eye scours the page alighting upon categories that either shock or provoke curiosity. The persistent reader of *Almásfüzitő: An Index* can find sardonic humour in some of the entries of the TATAI licence, such as the prevalence of '99 codes' or 'wastes not otherwise specified', which effectively grant TATAI permission to dump any pollutant legally.

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<sup>23</sup> For further information on the relationship between Greenpeace and myself, please refer to Appendix ii.

One of the problems that had emerged from my work at Almásfüzitő was the inability of the audience to know exactly what the chemical composition of a red powder or an orange solution present within the frame of the image actually represented. The capacity to function in the manner of an environmental activist and take my own mineral samples, which I could then match to a photograph, was one obvious area where my approach on location could be improved. Furthermore, the act of reaching out and interacting with the polluted topography represented the sense of direct action and active agency on the part of the photographer, which I was intending to communicate to my audience through my concept of ‘the activist’s perspective’. My second project *Mynydd Parys & Afon Goch* represents the moment when I made this transition in my practice. The simple act of taking samples from a location and having the minerals tested, necessitated the invention of complex design-oriented strategies, which could introduce the audience to some of the scientific ideas underpinning the mineral sample analysis.

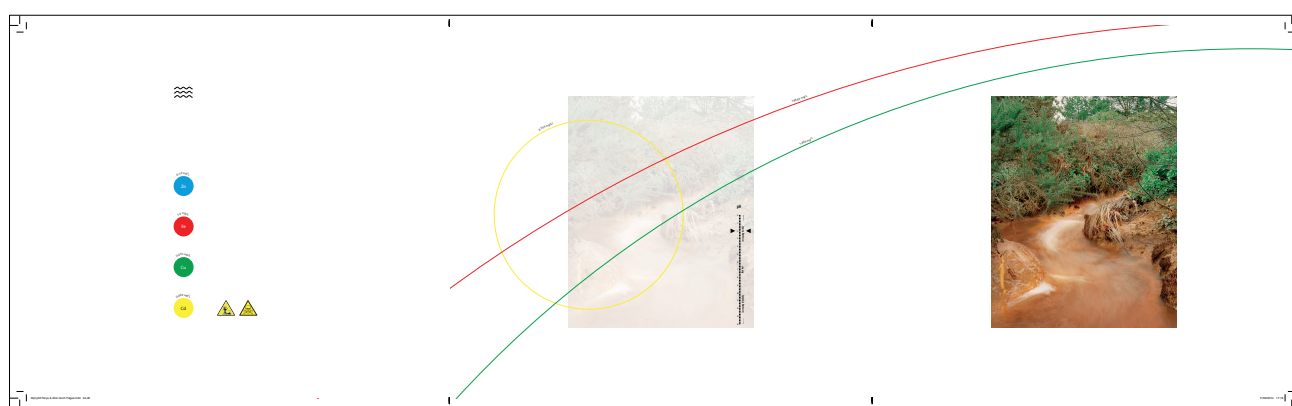


Fig. 30. Conohar Scott for Environmental Resistance, sample gatefold (right) *Mynydd Parys & Afon Goch* (2014).

In *Mynydd Parys & Afon Goch*, the publication was structured around the development of various symbols and icons, from the familiar periodic table detailing the elements that would later be used in the infographs, to the creation of assorted calibrated scales and symbols which could communicate information economically and using as few words as possible. In the case of the photographs that were small enough in scale to accommodate taking a mineral sample, a triptych gatefold system was developed (Fig. 30), in order to host a key, the infograph, and the photograph on a single spread. In the triptych



format, the left page provided a key, which illustrated in the form of a 15mm circle the uppermost safe limits for the minerals that had exceeded those limits in my sample. If the sample result measured twice the value of this upper limit then the circle would be double in size i.e. 30mm, and so on for orders of magnitude thereafter. The right side of the gatefold was devoted to displaying the photograph in its final edited appearance, so that the aesthetic qualities of the image could still be appreciated.

In the middle of the triptych, a very pale ‘trace’ of the photograph was reproduced, with just enough detail to be discernible. This second trace image was introduced in order to ensure that the audience made the connection between the values of the infographic data (i.e. the circle overlays and the pH scale) and the location of the photograph. In a previous incarnation of the design, Victoria Redman (the graphic designer in Environmental Resistance) and myself had attempted to overlay the circles on top of the photograph as it appears on the right side of the triptych, i.e. the full colour version of the image; we felt, however, that the resulting image was cluttered and that the overlays detracted from the indexical function of the photograph to document the environment, which in some cases was almost totally obscured by the large volume of the infographic data.

Hartmut Stöckl argues that the success of a multimodal text is reliant upon the need to ‘generate and conserve a kind of balance between denotation on the one hand and connotation/association on the other’ (Stöckl, 2004: 26). For this reason, the multimodal approach developed in *Mynydd Parys & Afon Goch* can be regarded as an attempt to create a balance between the quantitative scientific ‘evidence’ of a perturbed ecosystem and the qualitative representation of pollution provided by the photograph. Within the indexical properties of the photograph, the red oxidised iron content of the Afon Goch Amlwch River provides an obvious visual connotation that the watercourse is contaminated. Upon further examination, however, the limitations of the photograph to effectively document industrial pollution become obvious – whilst the oxidised iron has turned the river red and is readily

apparent to the observer, analysis of the key on the left side of the spread confirms that the most toxic minerals such as cadmium or arsenic are only present in concentrations of micrograms per kilogram, ensuring that minerals of this type are invisible to the naked eye. The relative ‘invisibility’ of many pollutants to the camera lens explains why the photograph *must* be anchored and contextualised by accompanying modal forms, if my ethical claim for an informed audience is to be effectively realised.

The project *Mynydd Parys & Afon Goch* was not the first example of an artist combining the photograph with a mineral sample reading taken from within the frame of the image. Andreas Müller-Pohle’s *The Danube River Project* (2007) represents an extensive survey of the River Danube from its source in Germany to the river’s culmination at the Black Sea in Bulgaria. In an approach that is entirely representative of what I am defining as ‘the activist’s perspective’, Müller-Pohle’s technique for documenting the Danube is to use a submersible camera and to immerse his body in the river ecosystem (Fig. 31). The result is a series of images that simultaneously document the river’s ecology, the meniscus of the water line, and evidence of culture and habitation on the riverbank beyond. Crucially, this qualitative representation of the Danube is accompanied by a quantitative reading of the river’s mineral content, which Müller-Pohle captured from within the frame of the image in a manner similar to the *Mynydd Parys & Afon Goch* photographs – although I was not aware of Müller-Pohle’s project at the time. At the bottom of each image, Müller-Pohle provides a reading of carbon levels, electrical conductivity, and basic mineral content, which are displayed in a white script that runs across the bottom of the image in the manner of a geotag or dot matrix print out.

In an introductory essay to *The Danube River Project*, Ivaylo Ditchchev (2007) provides a cultural overview of Andreas Müller-Pohle’s project, which says little about the ecological aspects of the study. In one of the few remarks aimed directly at the health of the river ecosystem, Ditchchev comments that for the populations who live in the countries

downstream of the Danube in the east of Europe, the river has long been thought of as a heavily polluted watercourse, which can cause dermatological irritations for bathers. Here Ditchev's observations on how northern and central Europeans pollute the Danube, to the detriment of those living downstream to the east, chime with the knowledge gleaned from the *Almásfüzitő: An Index* project, which demonstrates that Hungarians are flushing into the Danube a host of noxious toxins.

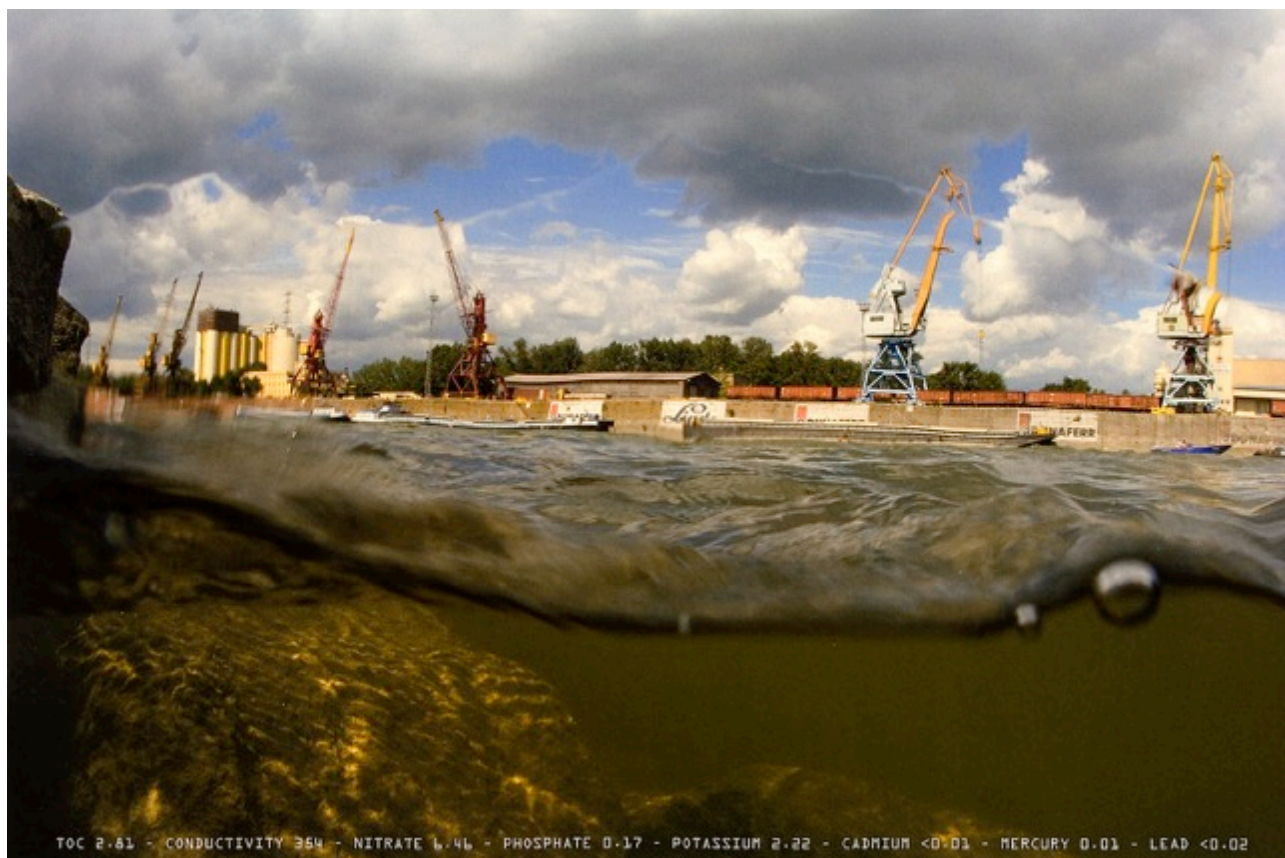


Fig. 31. Andreas Müller-Pohle, *Dunaújváros, Hungary*, taken from *The Danube River Project* (2007).

According to Ivaylo Ditchev, Müller-Pohle's primary motivation as an artist is not to directly confront the subject of river pollution but to address issues of trans-European sovereignty and identity in the contemporary era:

The white chemical data to the bottom of the pictures should not be taken as an eco-alert in keeping with the western fantasy of polluting modernity. Of course the river is polluted [...] Scientists may be able to explain why figures go up at some place and down in others, but for the artist they seem to be simply part of the impassive matter of which a border is made (Ditchev, 2007: 13).

Here Ditchchev's assertion could be interpreted as a simplification of Müller-Pohle's artistic strategy. In the 'Acknowledgements' section at the rear of the publication, Müller-Pohle explains that he carried out a multimodal study of the Danube, which not only included mineral sample analysis but also sound recordings, 'with the aim of producing both a "pictorial atlas" and a "blood count" so to speak (Müller-Pohle, 2007: 170), in order to ascertain the health of the Danube. In defence of Ditchchev, however, it is also worth noting that whilst Müller-Pohle's photographs contain the mineral sample results in white script at the bottom of each photograph, the values are not presented alongside any additional information, which could 'inform the audience' if the mineral samples were in excess (or not) of accepted scientific limits for the marine ecosystem. Instead, the Environmental Quality Standards (EQS)<sup>24</sup> are provided on a single page located at the rear of the book (Müller-Pohle, 2007: 168) but appear at no other point in the publication. The marginalisation of this crucial information – without which the mineral sample results are merely decorative and cease to have any scientific meaning – would seem to validate Ditchchev's assertion that Müller-Pohle's utmost priority was not to comment on the environmental health of the Danube after all.

Arguably, the essential difference between the design of the complex three-page spread in *Mynydd Parys & Afon Goch*, and the simple line of text as presented in Müller-Pohle's *The Danube River Project* (2007), lies in my greater commitment to 'informing the audience' about the environmental problems existent in the watercourse. This commitment is demonstrated by placing environmental science data on an equal footing with the aesthetic qualities of the photograph (fig. 30). By comparison, I would argue that the relegation of complex scientific data to a decontextualized set of numeric values in *The Danube River Project*, which are not easily cross-referenced or understood by a layperson, consequently does little to encourage an ecological appreciation of the watercourse.

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<sup>24</sup> Environmental Quality Standard (EQS) is the concentration of a particular pollutant or group of pollutants in water that should not be exceeded in order to protect the environment.

According to my very specific interpretation of Müller-Pohle's project, which ignores Müller-Pohle's concerns with European territoriality, and values only an ecological understanding of the watercourse, I argue that the display of scientific data in such an abbreviated form does not conform to the ethical parameters I set myself in producing the *Mynydd Parys & Afon Goch* publication. My obligation to furnish the reader with a comprehensive understanding of the scientific analysis of the mineral samples, in which sample results were presented alongside the EQS limits so that a direct comparison between the two could be made, represents my commitment to the notion of 'the informed audience' in action.

### **3:5 The Informed Audience II**

In my third and final project *No Al Carbone, Brindisi*, whilst I was still committed to entering locations and encountering the reality of pollution at close quarters, my ambitions to utilise 'the activist's perspective' were occasionally thwarted by working in an industrial zone that was active as opposed to the historic Mynydd Parys location. The obvious barriers of perimeter fences, and the legality of trespassing into sensitive areas of industrial production, ensured that like Burtynsky, many of the photographs had to be captured using a telephoto lens from a significant distance (Callahan 2002: 94) (Fig. 32). The result is a style of photography that on occasions approaches Burtynsky's 'industrial sublime', due to the presence of structural motifs, which emerge as a result of photographing large-scale objects such as transport ships, cranes and the industrial infrastructure of the port at Brindisi. The challenge of *No Al Carbone, Brindisi* was therefore to determine if the presence of additional modal forms, in the context of the photobook, could succeed in ameliorating some of the negative connotations implicit in the 'industrial sublime'.

The photo series begins with an examination of the Brindisi *Porto Medio* ('Middle

Port' (Fig.32), which is where ships carrying coal from the Balkans dock and offload their cargo for transport to Brindisi's four coal-fired power stations. As the series progresses, distinct geographical areas are documented, such as the Micorosa fly-ash pond (Fig. 46) (an ashen landscape) and a thirteen-kilometre road and conveyor belt installation, which stretches from the port area to the Cerano power station in the south east of the industrial zone. The last section in the photobook concerns the Cerano PowerStation itself, which is the largest source of fossil fuel pollution in Italy and one of the largest polluters in Europe.



Fig. 32. Conohar Scott for Environmental Resistance, *Porto Medio, No Al Carbone, Brindisi* (2014).

Although *Porto Medio* (Fig. 32) does depict evidence of coal pollution in the foreground areas, this theme is marginalised when it is set against the industrial infrastructure and the misty backdrop of the sky. The restricted palette of greys and earthen tones that constitutes the sky and the industrial buildings of the port are interspersed with a horizontal distribution of punchy orange and yellow tones, which boost

the vibrancy of the scene. The horizontal distribution of colours is echoed by the placement of key compositional elements, such as the raised conveyer belt system and the distribution of cranes and lorries, which populate the middle of the photograph and allow the eye to travel across the image.

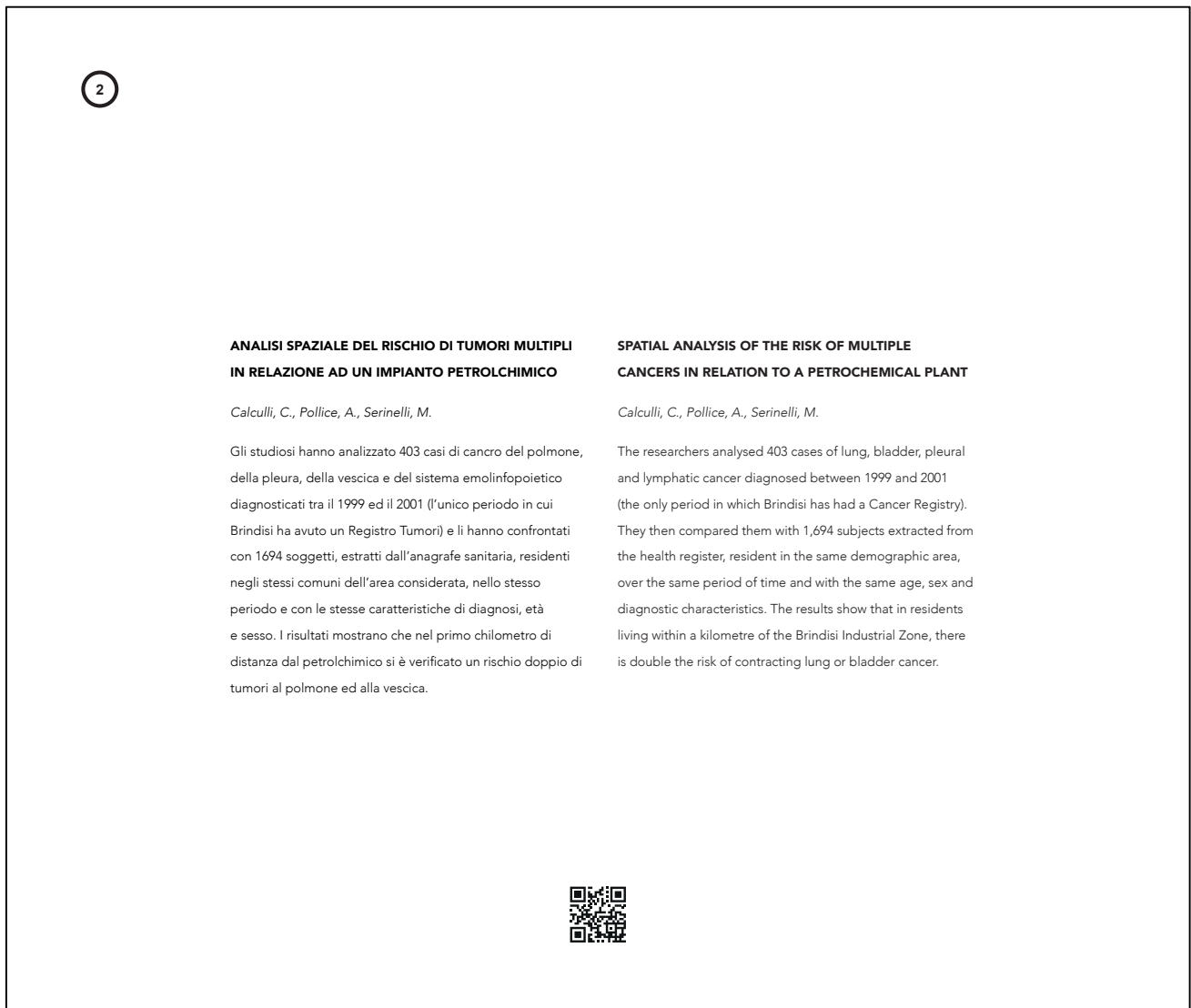


Fig. 33. Environmental Resistance, *Porto Medio (caption), No Al Carbone, Brindisi* (2014)

In my claims for a multimodal approach to the documentation of industrial pollution, it is important to stress that my argument refers to the printed form of the photobook, which provides an extended canvas for the organisation and distribution of various modes – captions, graphic design icons (with an emphasis on the iconography of Web 2.0), environmental science data, political manifestos, cartography, legal statutes, infographs and diagrammatic overlays – all of which can be employed in order to make the



case for environmental remediation. In the example of *Porto Medio (caption)* (Fig. 33), a sense of foreboding and victimhood is connoted in the photograph by the placement of text on the page facing the *Porto Medio* image. The function of the captions in *No Al Carbone, Brindisi* is to make the existence of the ugly subject fully apparent to the audience.

In the caption facing *Porto Medio* (Fig.33), the audience is asked to read a summary of a scientific report, which explains the dangers of living within a 1km radius of the Brindisi Industrial Zone. The headline is self-explanatory: 'Spatial Analysis of the Risk of Multiple Cancers in Relation to a Petrochemical Plant'. Upon further reading, the audience also discovers that the scientific study specifically concerns the Brindisi Industrial Zone, which *Porto Medio* is a part of. The disclosure of this information is conducted in the knowledge that on the previous spread a satellite photograph had detailed the proximity of the Brindisi Industrial Zone (showing clearly the port area) to the city of Brindisi, demonstrating that many areas of habitation lay within a 1km distance of the industrial infrastructure. By situating the *Porto Medio* photograph within a multimodal context, I was able to balance the aesthetic qualities of the photograph with sobering textual information pertaining to the prevalence of cancer rates in the local community.

Many of the photographs in *No Al Carbone, Brindisi* are reminiscent of the setting for Michelangelo Antonioni's film *Red Desert [Il deserto rosso]* (1964), which was filmed in the port of Ravenna, northeast Italy. In *Red Desert*, Antonioni utilises the industrial backdrop of the port to suggest the 'violent transformation of the countryside around the city' (Antonioni, 1964, cited in Gandy, 2003: 221) due to the pernicious effects of industrialisation. Utilising misty atmospheric conditions and paying close attention to the structural motifs of the industrial apparatus of the port, which belch out acrid smoke into the atmosphere, Antonioni alludes to the fragile mental state of his chief protagonist Giuliana (Monica Vitti) by drawing a comparison between industrial pollution and (psychological) illness.





Fig. 34. Michelangelo Antonioni, still taken from *Red Desert* [*Il deserto rosso*] (1964).

In *Red Desert* the perturbation of the ecosystem by industrial pollution is suggested not only by Giuliana's mental decline but also by numerous shots of junk and detritus, which litter fields and river systems in many of Antonioni's scenes. Matthew Gandy notes that Antonioni punctuates his subdued grey palate of mist and industrial structures with flashes of colour (Fig. 34), which emanate from the chimneys of petrochemical works or from the products themselves, in order to provide 'a literal representation of the chromatic dissonance of modernity' (Gandy, 2003: 227). For Antonioni in *Red Desert*, the use of colour is expressive of the eco-toxilogical threat, which industrial capitalism exerts upon the psychological health of the political subject. At variance to this reading, however, Gandy also observes Antonioni's use of colour is ambiguous because as an artist Antonioni takes inspiration for the aesthetic possibilities provided by working in such a hyper-industrialised location:

I don't say that there ought to be a return to nature, that industrialization is wrong. I even find something very beautiful in this mastery of man over matter. To me, these pipes and girders seem just as moving as the trees (Antonioni, 1964, cited in Gandy, 2003: 222).

It is precisely the tensile relationship existent between the political intentionality of the

film's narrative structure, and the immersive aesthetic possibilities offered by filming in the Ravenna industrial enclave, which ensures that *Red Desert* is not simply polemic in tone but appears as a complex and beguiling story.

If I was guilty of becoming fascinated by the strikingly coloured mineral deposits of Mynydd Parys, at the risk of losing sight of my ethical imperatives with regards to 'the activist's perspective', then my preoccupation with the Brindisi industrial topography shared much in common with Antonioni's fascination with the Ravenna industrial infrastructure. Whilst I was fully aware of the ecological harm posed by the coal-fired power stations, the petrochemical works and the thirteen-kilometer coal transportation road and conveyor belt system, the opportunity to photograph such extensive industrial apparatus, which transformed the agrarian landscape of Puglia in a similar manner to Antonioni's Ravenna, represented a unique opportunity to create a compelling series of photographs. Moreover, the comparison with Antonioni's *Red Desert* is further exacerbated by my choice to photograph the topography of the Brindisi industrial zone only when the atmosphere was misty with evaporating morning dew – a phenomenon that occurred for about one hour each morning. My intention was to create an oppressive spatial effect, which was suggestive of an atmosphere pregnant with airborne pollutants. The flat light and short depth of field provided by the mist also had the advantage of isolating my primary subject, which served to further direct meaning in the photographs towards a pro-environmentalist reading of the scene.

In *Red Desert*, Antonioni emphasises Giuliana's sense of alienation and psychological disorientation by employing cinematic techniques, such as the blurring of focus at key moments in a shot, in order to heighten the audience's awareness of Giuliana's state of mind. In the use of such ploys, Antonioni departs from a purely architectural documentation of the Ravenna port, in order to pursue an expressive form of image making in which the depiction of the landscape is utilised for anthropocentric purposes – in this

instance to convey an impression of Giuliana's mental disorder. With one notable exception, which I shall describe momentarily, my photographs of the Brindisi industrial zone did not depart from an architectural style of documentation, which placed great emphasis on the even illumination of light due to the misty atmosphere and maintained focus throughout the image from the foreground to infinity. As an alternative, the restrained and formal qualities of the photographs were juxtaposed against the emotively engaging content of the captions and QR codes, displayed on the page facing the photograph. In each instance, the caption was tended to 'anchor' (Barthes, 1977: 32-51) meaning to the image by summarising scientific studies, which attested to a substantive environmental health threat in the location(s) documented. To this end, the great majority of photographs in *No Al Carbone, Brindisi* are not emotively expressive of sickness and disorientation in the way that a scene in Antonioni's *Red Desert* might be; this is because of the role that text, properly extraneous to the image, plays in affirming the conceptual relationship between the photographed industrial apparatus and physiological or psychological manifestations of sickness, which occur in the political subject.

Importantly, the last spread in the *No Al Carbone, Brindisi* series represents the sole occasion when I chose to depart from my preferred architectural style of representation in favour of an overtly expressive form of documentation. The concluding photograph of the publication (Fig. 35) utilises the fast flowing water from the Cerano power station's outflow, which leads to a rocky promontory populated by a lone fisherman, in order to express my rage and mystification with the on-going health problems associated with the four coal-fired power stations and various petro-chemical works, which constitute the Brindisi industrial zone. When interpreting this photograph, it is important to consider the photograph within context. On the preceding spread, the accompanying caption detailed the probable affects of PAH (Polycyclic aromatic hydrocarbons) contamination in the marine ecosystem thus establishing a causal link between inshore fishing and contamination of the human food chain. Turning over the page to the last photograph in

the series, the silhouette of the fisherman makes this connection explicit. Moreover, the image also functions as a summary for the entire book.



Fig. 35. Conohar Scott for Environmental Resistance, *untitled* (final image), *No Al Carbone, Brindisi* (2014).

The caption on the facing page provides a QR code link to an Italian translation of Guy Debord's essay 'A Sick Planet' (2008), which is a text that expressly makes a correlation between sickness in the political subject and industrial capitalism. The lines given in the caption pertain to the closing phrases in Debord's essay: 'Alienated industrial production makes the rain. Revolution makes the sun shine' (Debord, 2008, 94) and the quote is intended to confer meaning upon the swirling torrent of the Cerano power station's outflow, which is intentionally disorientating to focus upon. In the 'Acknowledgements' page directly following this last photograph, the reason for choosing this Debord quote in particular – and my decision to photograph in overcast, misty conditions generally – becomes clear. The graphic provided in the 'Acknowledgements' section, which is a sunny

vision of solar panels arrayed in the form of a tree (Fig. 36), point the way towards a renewable energy revolution and a move away from our current dependency on fossil fuels. The transition to renewal energy production is of course the definitive message of the activist group No Al Carbone ('No coal'), to whom the publication was dedicated.



Fig. 36. Environmental Resistance, *Solar Tree and Acknowledgements* (final caption), *No Al Carbone*, Brindisi (2014).

### 3:6 Conclusion

This chapter represents the first evaluation of my practice. I begin my discussion by attempting to answer some of the questions raised by my first research question: ‘What are the ethical implications of photographing industrial pollution?’ I begin my commentary by introducing Kant’s notion of a ‘disinterested’ (Kant, 2000: 91) beauty, as a means of disentangling the aesthetic properties of an image from the issues addressed by my practice, which is environmental despoliation. To aid my argument, I introduce Mark Cousins’ (2009) commentaries on the correlation between dirt and ‘ugliness’, as a non-aesthetic phenomenon, which has more to do with the realisation that matter i.e. pollutants, are in the ‘wrong’ place or are present in ‘unnatural’ quantities. Importantly, Cousins’ notion of the spatial voracity of ‘dirt’ provides a way of understanding that photographs depicting the perturbation of ecosystems can appear beautiful to behold or be fascinating because the existence of beauty and ‘the ugly subject’ do not conform to the same criteria of judgement. This is especially true when the pollutants themselves are invisible, as is the case with John Darwell’s (2001) photographs of the Chernobyl Exclusion Zone.

In this chapter I also attempt to resolve my second research question – ‘How can photography be used as a means of conducting environmental protest?’ Previously, I argued that Burtynsky’s aesthetic of the industrial sublime shares historical associations with capital, and in this chapter I make a further point against the sublime, when I argue that the absence of additional captions or texts in Burtynsky’s work serves to decontextualise the photograph and remove it from what Benjamin calls ‘the context of living social relations’ (Benjamin, 1973: 87). As a response, I attempt to construct a counter-aesthetic position to the industrial sublime by claiming that a close identification with the polluted topography, which I have dubbed ‘the activist’s perspective’. Here my claim rests in the assertion that through the medium of the photograph, the audience takes on a pro-active, perspectival viewpoint of an environmental activist, at the point of

uncovering visual ‘evidence’ of pollution in situ. Whilst I am frank concerning the difficulties I faced when attempting to adhere to ‘the activist’s perspective’, my decision to take mineral samples from within the frame of the image is also indicative of my commitment to photographing in the manner of an activist.

My second and more substantive claim for an ethical photographic practice is predicated upon my belief in ‘the informed audience’. The act of taking mineral samples, which provides a breakdown of the pollutants present within the photograph, led to the necessity of working with a multimodal method of display that included: infographs, typography, iconography and a conceptual approach to the design of the photobook, in which knowledge is classified and ordered using the extended canvas of the printed format. Multimodality therefore becomes the method through which I situate my practice into a broader ecological and social context; however, this development in my practice also ensured that I moved beyond the medium specificity of photography and into a post-conceptual model of photographic practice.

As part of my discussions surrounding multimodality as a communicative strategy, I discuss my practice in comparison to Andreas Müller-Pohle’s *The Danube River Project* (2007), in which the artist also takes mineral samples from within the frame of the image. I argue that Müller-Pohle’s strategy of displaying his mineral analysis is too abbreviated to satisfy my self-imposed ethical obligation to ‘inform the audience’ about the effects of environmental pollution. My analysis of *The Danube River Project* in relation to my *Mynydd Parys & Afon Goch* publication also makes way for a comparison of my No Al Carbone, Brindisi project in relation to Michelangelo Antonioni’s film *Red Desert* (1964), allowing me the opportunity to discuss how QR links to scientific studies can bring about greater awareness of the health problems associated with industrial pollution.

## Chapter 4: An Activist Photographic Practice

### 4:1 Introduction

In this chapter I make a claim for a form of artistic practice, which is capable of evincing the politics of environmental activism through the production and dissemination of photobooks. I argue that Murray Bookchin's concept of social ecology shares much in common with Jacques Rancière's concept of art as '*dissensus*' (Rancière, 2010: 139) and his proposition that the experience of encountering art can be regarded as a moment of '*resistance*' (Rancière, 2010: 173) against the privations that capitalism exerts upon the political subject, through its relentless drive to turn individuals into consumers. In an effort to justify my claims for a politicised practice, I draw heavily upon Rancière's theories concerning the reciprocity that exists between 'aesthetics' and 'politics', which I interpret from a post-anarchist standpoint. Rancière is important to my argument because he allows for a comparison to be made between the political theory of social ecology and current post-structuralist debates concerning the social function of art in contemporary culture.

Using Rancière as a starting point for an evaluation of my practice, I argue that the mimetic acts of constructing and disseminating photobooks is a form of participatory politics, predicated upon the anarchist concept of direct action, and founded on an axiomatic belief in democratic equality between all political subjects. Drawing upon evaluations of my projects, I claim that the photobook is capable of functioning as a profoundly dissensual medium, which has the potential to engage a diverse range of individuals – government representatives, legal practitioners, scientists, environmental activists and concerned local residents from the regions profiled – in order to affect change in the subjectivity of those persons. As part of an extended description of my working methods, I discuss the importance of collaborative working practices and my formation of



the collective, Environmental Resistance. Furthermore, my account of how my working methods have evolved, and how my various collaborations came about, allows for the opportunity to discuss the importance of environmental science in my practice, which as a form of quantitative ‘evidence’ can be usefully combined with the qualitative and indexical properties of the photograph to produce a wholly persuasive case for environmental remediation. This chapter therefore culminates by situating my work simultaneously within the domains of environmental science and environmental activism.

#### **4:2 Aesthetics as Politics**

The great attraction of Rancière’s theories for an artistic practice centred upon the core values of social ecology, is that Rancière’s emphasis on the democratic equality of political subjects <sup>25</sup> is commensurate with Murray Bookchin’s concept of a ‘libertarian municipalist society’, which Bookchin explains means ‘replacing the State, urbanization, hierarchy, and capitalism with direct-democratic, cooperative institutions grounded in the municipal political realm’ (Biehl & Bookchin: 1998: 85). As I shall elaborate upon in the following sections of this chapter, I regard the process of making and disseminating the photobooks I have created to be a form of libertarian direct-democratic action. Rancière’s theories concerning the reciprocity that exists between what he describes as, ‘the aesthetics of politics [and] the politics of aesthetics’ (Rancière, 2004: 25) provides the basis for my claims for a photographic practice grounded in the political theory of social ecology. Rancière’s conceptual schema is therefore important to this thesis because Murray Bookchin as a political theorist does not address contemporary post-structuralist debates concerning the role of art within the culture. It is important, however, to first identify what Rancière means by his use of the terms ‘aesthetics’ and ‘politics’ and to establish the points

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<sup>25</sup> In the passages that follow, I make reference to Rancière’s conceptions of universal democratic equality; however, for an extended overview of Rancière’s philosophical stance towards social equality please refer to *On the Shores of Politics* (2007).

of common interest, which exist between the two descriptive categories, and that of Bookchin's social ecology.

What Rancière considers to be 'politics' is significantly different from the colloquial use of the term. According to Rancière, 'politics' is a form of 'deviation from [the] normal order of things' (Rancière, 2010: 35) when the distribution of power, which he terms as the 'distribution of the sensible [*le partage du sensible*]' (Rancière, 2010: 36) is disrupted, if only momentarily, by the demands of those seeking to address a particular grievance. For Rancière, 'politics' is located within a specific time and space in which the invisible, i.e. those individuals excluded from and unrepresented by power, acquire new forms of visibility. The process of becoming visible implies that for a moment in time, the *demos* or the people 'outside of the count' (Rancière, 2010: 32) who 'have no speech to be heard' (ibid.) succeed in becoming visible – which is to say that they become participatory democratic subjects.

Rancière tells us that actual 'politics', those rare moments when the *demos* do succeed in causing a 'rupture' (Rancière, 2010: 33) in the fabric of the policed social order, hardly ever occurs. This is because 'the distribution of the sensible' is regulated by what Rancière refers to as '*la police*' (Rancière 2010: 36). In his conception of *la police*, Rancière relies heavily on Michel Foucault's *Omnes et Singulatum: Toward a Critique of Political Reason* (Foucault, 2002: 299-325); however, the fundamental difference between Foucault's examination of *la police* and that of Rancière, is made explicit by Rancière himself when he states that Foucault 'was never drawn theoretically to the question of political subjectivisation' (Rancière, 2010: 93). Rancière therefore transforms Foucault's historicist reading of *la police*, in order to include it in his own political telos.

In his essay *Ten Theses on Politics*, Rancière defines what he means by *la police* when he states that:

The police is not a social function but a symbolic constitution of the social. The essence of the police lies neither in repression nor even in control over the living. Its essence lies in a certain way of dividing up the sensible (Rancière, 2010: 36).

According to Rancière, *la police* functions by determining the privilege of discourse. To illustrate this point, Rancière provides a metaphor of a street protest, when he states that *la police* is enacted by convincing potential onlookers that the spectacle of protest before them is of no interest. Metaphorically speaking, the slogan of *la police* is: “Move along! There is nothing to see here!” (Rancière, 2010: 37). The technique employed by *la police* is therefore one of distraction and continual ‘circulation’ (ibid.), a kind of perpetual disorientation and deferral of real ‘politics’, which results in the disappearance of the political subject.

For Rancière, ‘politics’ consists of ‘reconfiguring the distribution of the sensible which defines the common of the community, to introduce into it new subjects and objects, [and] to render visible what had not been’ (Rancière, 2004: 25); this process is referred to by Rancière as ‘*dissensus*’ (Rancière, 2010: 139). It therefore follows that when people act out of the presupposition of equality, they engage in a form of *dissensus* from the prevailing order of *la police*, which is predicated upon a denial of their existence as democratic subjects. Todd May argues that for Rancière, ‘democracy lies in the action itself’ (May, 2008: 52), and it is precisely Rancière’s concept of *dissensus* and his insistence on democratic equality amongst all subjects, which makes him so attractive to anarchist thinkers like Todd May.

I argue that my actions are commensurate with Rancière’s conception of ‘politics’ because in the act of producing a work of art, I undergo a shift from a position of hitherto passivity and invisibility as a political subject, to a form of citizenship that announces my visibility as a participatory democratic subject. If, for example, I decide to wake up one morning and take my camera into a location where I have every reason to believe that environmentally damaging activities are taking place (see Appendix ii), I am engaging in a form of praxis that is predicated upon the presupposition of ‘active equality’ (May, 2010)

amongst all subjects. I therefore argue that I require no one's permission to carry out such an activity and I refuse to acknowledge any authority that would challenge my capacity to do so.

Rancière's concept of 'politics' can be usefully compared to Murray Bookchin's libertarian municipalism because Bookchin is also critical of how the dominant modes of discourse in a capitalistic society condition social behaviour. Indeed, Bookchin goes as far as to claim that: 'In a society that has shriveled the self into a commodity – into an object manufactured for exchange – there can be no fulfilled self' (Bookchin, 1986: 67). In the anarchist texts of social ecology, Bookchin advocates a rediscovery of the self in the face of capitalism by using the familiar anarchist tactic of direct action, which Bookchin claims is 'a mode of praxis intended to promote the individuation of the "masses"' (Bookchin, 1986: 23). Importantly, Bookchin argues that the power of direct action lies in its capacity to 'assert the identity of the particular within the framework of the general' (ibid.).

In my descriptions of my practice throughout this thesis, I argue that the production of art – as understood from the perspective of the artist – fulfills the role of individuation that Bookchin describes because the artist undergoes a transformation in his/her political status, from an initial position of passivity typical of the disenfranchised individual, to that of an active and participatory political subject. Furthermore, I argue that the production and dissemination of the photobooks I have created can be considered as an example of a direct and unmediated form of communication, between the artist (or the collective Environmental Resistance, if the collective is to be understood as being a singular entity) as producer of the art object and the community of individuals who represent the attendant audience. Importantly, this relationship is founded upon a preconceived notion of universal intellectual equality, as existent between *all* political subjects – there is no "dumbing down" of the content in the publications which constitute my practice. Instead, there is an

expectation that knowledge pertaining to sites of pollution should not be restricted to individuals who claim to represent the needs of the public in absentia.

At the core of Rancière's description of 'politics' is his claim that 'politics' is essentially a 'system of a priori forms determining what presents itself to sense experience' (Rancière 2006: 13). Rancière therefore argues that the process of becoming a visible political subject is comparable to the 'primary aesthetics' (Rancière 2006: 13) of art because the mimetic acts of 'doing and making' (ibid.) in the creation of art result in a comparable form of visibility, which is evident in the material properties of the art object itself. In this sense, Rancière draws a comparison between the purposiveness of the artist who makes an object with intentionality in mind, and the purposiveness of political protestors, who transform themselves into visible political subjects in order to address a particular grievance. At a fundamental level, this acting out of individualised praxis in both the aesthetic and political realms can be mutually regarded as a form of '*subjectification*' (Rancière, 1999, cited in May, 2010: 70) in which individual(s) assert their identity as members of a community by becoming active producers of culture.

Directly concerned with the disruption of *le partage du sensible* is the capacity of art to function as a 'non-polemical' (Rancière 2010: 119) framing tool, for the articulation and dissemination of *dissensus*. According to Rancière, art's dissensual aspect lies in its 'singular power of presence, of appearing and inscription, the power that tears experience from ordinariness' (Rancière, 2004: 19). Rancière therefore makes a claim for the potential of art to 'intervene' (Rancière, 2004: 25-6) and reconfigure the social in a profoundly dissensual way. It therefore follows that the cultural spheres of art and politics both share the capacity to alter *le partage du sensible*; at the heart of Rancière's argument is the assertion that aesthetics and politics are 'linked, beneath themselves, as forms of presence of singular bodies in a specific space and time' (Rancière, 2009: 26). This root parity allows Rancière to argue that it is 'more valid to see [...] the plurality of ways in

which they are linked' (Rancière, 2004: 46) than to meditate upon their essential differences.

Stephen Zepke (2011) points out that Rancière's concept of aesthetics owes much to Kant's Transcendental Aesthetic. Zepke argues that for Rancière, the experience of beauty and the 'free play' of imagination and understanding that accompanies it, is a 'singular sensible experience that creates a new, universal partition of the sensible, or *sensus communis*' (Zepke, 2011). Zepke argues that art therefore has the capacity to liberate individuals and instigate new forms of community predicated upon the common or universal experience of the aesthetic. It should be noted, however, that Rancière's claims for the politically reifying power of the aesthetic sits uncomfortably with theorists such as Peter Osborne, who argue that the notion of the aesthetic is 'peculiarly ill-suited to the comprehension of contemporary art' (Osborne, 2013: 71), which since the 1960s has been predicated upon the production of art forms that are founded upon the concept of 'anti-aestheticism' (Osborne, 2013: 47).

In defence of his claims for contemporary art's capacity to produce *dissensus*, Rancière argues that the avant-garde movements of art, i.e. (post)conceptual art practice, and modernism's aestheticism, i.e. art for art's sake, 'both register the same logic: that of a "politics" of art which consists in suspending the normal coordinates of sensory experience' (Rancière, 2004: 24). What Rancière argues is that both aspects of the modern/postmodern opposition in contemporary artistic practice share in common the capacity to introduce into the everyday new ways of seeing and thinking, new forms of discourse, which have the capacity to instigate 'a revolution in the very mode of production of material life' (Rancière, 2004: 33). On this point, Rancière's descriptions concerning the relations between modernist art and (post)conceptual artistic practice, accord with Jeff Wall's assertion that the anti-aesthetic of conceptual art 'was compelled to be both anti-aestheticist and aesthetically significant, albeit in a new "negative" sense, at the same moment' (Wall, 1995:

34). As Wall observes (see also my previous comments in section 3:2 ‘Beauty and the Ugly Subject’), the anti-aesthetic position of conceptual art soon become institutionalised and became an extension of the aesthetic canon (ibid.).

Rancière’s claims to a ‘political’ equivalence between modernism and (post) conceptualism are hugely contentious because in one stroke Rancière yokes together extremely diverse forms of art, such as abstract expressionism and photo-conceptualism, in order to suggest that aesthetic experience universally functions as a reaction against the privations that capitalism imposes upon the individual. Furthermore, Rancière’s conception of art as *dissensus* sits uneasily alongside the observation that if contemporary art practice is influenced by socio-historical forms such as the media, television, aspects of consumer culture etc., then contemporary artistic practice is also deeply rooted in the very discourses of *la police*, which Rancière claims art can subvert or reify. In other words, in Rancière’s reading of art as a profoundly dissensual media, Rancière does not take into account the degree to which different modes of artistic production have the capacity to redeem a repressive social order; for example, Watkins’ aesthetic approach to the documentation of mines can simultaneously be considered as art and advertising, which indicates that the role of the aesthetic in producing *dissensus* is more complex than Rancière admits.

Rancière’s support for Kant’s Transcendental Aesthetic is typical of a new found sense of engagement with the aesthetic in contemporary theory, which has recently been gathering momentum. Commentators such as Mike Wayne argue that the experience of the aesthetic in art is a more profound and intensely subjective experience than the type of encounter typified by capitalism’s appropriation of aesthetics for the purposes of encouraging commodity fetishism:

In short, the aesthetic is a realm where we can discuss important questions that we assume are of universal or social significance and not merely the expression of private capriciousness (Wayne, 2012: 395)

What Mike Wayne and Jacques Rancière both share is a common belief in the capacity of art to act as a catalyst for social emancipation. Rancière's 'politics' is therefore not the politics of grandiose revolutionary gestures or vanguardism; it is instead a form of politics that is realised on an inter-subjective level, through the reification of countless 'small narratives' (Rancière 2011: 9) as initiated by the *demos* for the *demos*.

Todd May argues that Rancière's post-structuralist theories concerning the congruities existent between politics and aesthetics can be interpreted as 'a contemporary form of anarchism' (May, 2010: 26). This is because as May understands it, post-structuralism intrinsically favours longstanding anarchist concepts such as 'decentralization, local action, [and] discovering power in its various networks rather than in the state alone' (Id., 29) and it shares with anarchist theory a rejection of both liberalism and traditional Marxist theory as viable models for future societal organisation. May's interpretation of post-structuralism as 'a contemporary form of anarchism' (May, 2010: 26) has led to what has variously been described as 'post-anarchism'<sup>26</sup>, which is a newly emergent branch of anarchist theory seeking to address contemporary political issues by utilising the analytic possibilities offered by post-structuralist theory.

For the purposes of this thesis, May's 'post-anarchist' interpretation of Rancière's post-structuralist writings on the subject of democratic equality allows for a comparison to be made between social ecology as a political theory and post-structuralist debates concerning modes of artistic production and the nature or function of the aesthetic. Taken together, May's interpretation of Rancière as a post-anarchist provides the basis for my claim that my artistic practice can function as a form of 'politics' – in Rancière's sense of the term – that is anchored in the core ethical values of social ecology. As I shall expand upon further through the course of this chapter, the conflation of an anarchist political theory such as social ecology with aesthetic debates on-going in post-structuralism allows me to

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<sup>26</sup> A contextual understanding of the term 'post-anarchism' is briefly outlined in the Contextual Review (33-4)



directly address my second research question – How can photography be used as a means of conducting environmental protest?

#### 4:3 A Postal Protest

The International Chemical Secretariat P.O. Box 7005 SE-402 31 Göteborg SWEDEN	Prof. Paul Younger Director, Newcastle Institute for Research on Sustainability Newcastle University Devonshire Building Newcastle upon Tyne NE1 7RU United Kingdom	Peter Koller Case handler European Commission, DG Environment Unit A.1. (Enforcement, Infringements coordination & legal issues) BU-09 00/17 B-1049 Brussels BELGIUM	Jávor Benedek Chairman of the Env. Committee Hungarian Parliament Budapest V Széchenyi rakpart 19 HUNGARY
Genon Jensen Executive Director Health and Environment Alliance (HEAL) 28 Boulevard Charlemagne B1000 Brussels BELGIUM	Prof. Karl E. Lorber Montanuniversität Leoben Institut für Entsorgungs- und Deponietechnik Peter Tunner Strasse 15 8700 Leoben AUSTRIA	Ceaba Tabajdi MEP – Hungary Parlamentul European Rue Wiertz Altiero Spinelli 13G101 B – 1047 Bruxelles BELGIUM	Fazekas Sándor Minister Vidékfejlesztési Minisztérium 1860 Budapest HUNGARY
Pieter De Pous European Environmental Bureau Policy Director 34, Bd. de Waterloo B-1000 Brussels BELGIUM	Tomóri Balázs Greenpeace Hungary 1143 Budapest Zászlós u. 54 HUNGARY	Satu Hassi MEP - Finland European Parliament Rue Wiertz 60 Asp 08g351 B-1047 Brussels BELGIUM	Illés Zoltán Secretary of state Vidékfejlesztési Minisztérium 1860 Budapest HUNGARY
Kevin Stairs & Maki Sideridou Greenpeace European Unit Bellardstraat 199 Rue Bellard 1040 Brussels BELGIUM	Declana Octavia Sârbu MEP - Romania Parlamentul European Rue Wiertz Altiero Spinelli 13G169 B-1047 ROMANIA	Dr. Will Mayes CEMS University of Hull Scarborough Campus Filey Road Scarborough YO11 3AZ United Kingdom	Nagy Andor Budapest V Széchenyi Rakpart 19 HUNGARY
Dániel Ambrus Political Adviser, EC EU Commission office in Budapest Millenáris Park Lövőház u. 35 1024 Budapest HUNGARY	Dr. Györfös Péter Ambassador (Permanent Representation from Hungary to the EU) 92-98, Rue de Trèves 1040 Bruxelles BELGIUM	Cefic The European Chemical Industry Council Avenue E. van Nieuwenhuyse, 4 box 1 B-1160 Brussels BELGIUM	Axel Singhofen European Parliament PHS 04C35 Rue Wiertzstraat B-1047 Brussels BELGIUM

Fig. 37. Conohar Scott, list of recipients, *Almásfüzitő: An Index* (2012).

The rhetorical possibilities offered by the printed medium of the photobook, which I discovered in Mistrach's *Bravo 20*, provided the basis for my decision to use the printed medium as a means of displaying and disseminating my practice. It should be noted, however, that as much as I consider Mistrach's *Bravo 20* to be a model publication for demonstrating the role that the photographer can play within activist networks, I am also sceptical of Mistrach's unwillingness to enact 'National Park: A proposal' as a protest. Mistrach's refusal to treat the concept as anything more than a satire ensured that *Bravo 20* never confronted congress with its conflict of interests in authorising the US Navy's exploitation of the Bravo 20, whilst it also held the power to ratify the establishment of

national parks. If Misrach's *Bravo 20* is a published record of a protest that was never formally enacted, then *Almásfüzitő: An Index* represents an account of a protest that did come to fruition. Unlike *Bravo 20*, *Almásfüzitő: An Index* was not exhibited in the setting of an art gallery to a general public who were not involved in the legal proceedings concerning the dispute over the TATAI licence. Instead, the sole audience for the work consisted of a coterie of twenty officials, who were deliberately targeted because I sought to influence the processes of legal and political decision-making on-going in various bureaucratic departments affiliated to the European Commission and the EU Parliament.

Prior to my actions in 2012, Greenpeace, Hungary had initiated legal action against the Hungarian Government's Environmental Protection Agency for their involvement in issuing a licence to process toxic waste, which was subsequently proven to be in contravention of EU legislation (see 'Appendix ii'), and it was this on going legal process I was trying to draw attention to, by dispatching the photobooks to the recipients concerned. As a result, *Almásfüzitő: An Index* was dispatched in track and traceable envelopes, without prior warning, to twenty prominent individuals who had some (in)direct professional interest in the case (Fig. 37). Some represented the Hungarian government, others were EU ministers in neighbouring countries, or scientists who might be sympathetic to my protest; in such cases, it was hoped that the booklet would stimulate debate in a number of diverse professional communities around Europe. Upon opening the package, each recipient discovered the *Almásfüzitő: An Index* photobook and an accompanying piece of paper; wherein they discovered their own name circled in red amongst nineteen other names and addresses. This 'democratic disclosure mechanism' was intended to establish awareness amongst the recipients that they were part of a community of individuals who had received this package.

The act of dispatching *Almásfüzitő: An Index* was intended to embarrass representatives of the Hungarian Government into action, in the hope that they would

suspend the TATAI licence. The booklet itself, and even the accompanying sheet of paper bearing the addressees details, was printed using high quality matte paper, ensuring that the look and feel of the package suggested an item of value. In this sense, the material essence of the book functioned as an additional modal influence. It was my intention, however, that the knowledge contained within the book constituted something of a 'burdensome gift'. On the one hand, I wanted the recipients to feel that they were the beneficiary of a 'free' art object, whilst on the other hand I wished to implicate the recipient in an ethical quandary – they could either choose to ignore the knowledge contained within the book, or they could accept that I was attempting to make a serious point with a certain degree of humour and hopefully engage in further dialogue using the book. In addition to the twenty books posted to these recipients, a number of journalists in the UK and Hungary were emailed with an electronic version of the package, together with the list of addressees, in the expectation that they might be curious about the claims made in my publication and follow up the story independently.

The majority of the recipients did not acknowledge receipt of *Almásfüzitő: An Index*, although one of the UK scientists targeted as a recipient later became my artistic collaborator in Environmental Resistance, and was influential in the two projects that followed on from this initial protest. During the period when *Almásfüzitő: An Index* was being dispatched, I agreed with Greenpeace that it was best to remain publically unaffiliated; I was not a member of Greenpeace, and therefore I could not benefit from their capacity to generate media coverage. However, my independent stance revealed itself to be strength because it signified that a researcher from another EU country was taking an interest in what was hitherto a domestic dispute between Greenpeace and the Hungarian government.

As a photographer, I admit to being concerned with the aesthetic characteristics of the photographs I make – I am not as reductionist and carefree in my compositions as

‘Clinch’ for example. In the dissemination of my practice, however, my ethical obligations supersede my aesthetic preoccupations with the result that I am willing to forego or limit my visibility as an artist in order to address my work to an audience who is capable of influencing the case for environmental remediation. In my approach to my artistic practice, I therefore echo Michelle Bogre’s assertion that: ‘Aesthetic concerns drive activist photographers, but not to the degree that the aesthetic overrides the content or the process (Bogre, 2012: 6).



Fig. 38. Conohar Scott, package returned unopened, *Almásfüzitő: An Index* (2012).

In the course of dispatching *Almásfüzitő: An Index*, all of the packages were delivered by mail with the exception of two envelopes; one was returned to me unopened (Fig. 38) for no discernible reason. A copy intended for Illés Zoltán, Secretary of State for Hungary was delivered by hand by a third party, i.e. neither by myself nor by a member of Greenpeace, during a scheduled Environmental Committee meeting in which the on-going situation at Almásfüzitő was under discussion. Although I shall never truly know what occurred during that meeting, I was told subsequently that the Secretary of State “thanked

me” for my contribution, and commended the publication. The situation at Almásfüzitő then remained unaltered for nearly two years, until in November 2013, Greenpeace contacted me and confirmed that their legal action had been successful (see the press release cited in: *Almásfüzitő: An Index*, 2014); the EU commission had ruled that TATAI’s licence was in contravention of EU law.

I argue that the various EU mandarins, MEPs and Hungarian officials I targeted were not acting as public servants working in the public domain; they constituted instead a coterie of individuals empowered to make decisions privately on a representative basis. Using Plato’s commentaries on politics as the origin for his terminologies, Rancière refers to those who hold power on behalf of the majority as the *arkhê*, and the model of representative neo-liberal ‘democracy’ of the capitalist state as a form of ‘archipolitics’ (Rancière cited in May, 2010: 43). It therefore follows that individuals who hold public office paradoxically exercise a privately articulated use of reason in order to maintain a monopoly of power over the majority of individuals they represent. It is therefore the case that individuals, who do not belong to the *arkhê* i.e. the *demos*, have a limited capacity to make their views seen or heard. In this regard, Rancière’s description of the *demos* differs from that of Marx, for whom the proletariat are the sole subjects of capitalist exploitation (May, 2010: 50).

When considering the legacy of industrial pollution at Almásfüzitő from a standpoint that is oppositional to the hegemonic values of capitalism, it is important to acknowledge that the red ponds of the Almásfüzitő Aluminium Factory represent an environmental catastrophe, which derives from the Soviet occupation of Hungary in the years following WWII. The Almásfüzitő site is therefore an example of the problems associated with attributing the causes of industrial pollution *solely* to capitalist modes of production. Mike Davis observes that the reckless disregard for human and non-human life in the latter half of the 20<sup>th</sup> century was not a characteristic of any singular political

ideology (Davis, 1993) but that the USSR and the USA reciprocally created a vast legacy of pollution in the pursuit of greater industrial outputs. For eco-socialist commentators like Joe Weston, the Soviet legacy of industrial pollution is explained by viewing the USSR's model of industrialisation as being nothing more than a form of 'state capitalism' (Weston 1986: 4-5), which in actuality bore little resemblance to Marx's utopian vision of a communist society. Whilst it is essential to acknowledge the lamentable environmental legacy of the USSR, it is also important to recognise that the contemporary environmental threat offered by the Almásfüzitő ponds has been greatly exacerbated by the succession of capitalism in Hungary. Not only has the present Hungarian state failed to remediate the historic problems of pollution attributable to the Soviet regime, it incrementally worsened the situation by granting a licence to a company named as TATAI, which permitted the company to blend a further 166 toxic wastes and 244 non-toxic wastes into the already toxic red mud ponds of Almásfüzitő (see 'Appendix ii').

As an individual who had been into the *Almásfüzitő* Pond 7 who possessed a vital 'visual testimony' concerning the dumping of toxic wastes occurring at this site, I had no means of contributing to the legal or bureaucratic decision-making process which was underway behind the closed doors of the various EU secretariats, who were examining the licence given to TATAI by the Hungarian Environmental Protection Authority. In this regard, I considered myself to be representative of the *demos*. By dispatching my publication to the twenty recipients concerned, I was seeking to make a contribution to the scientific community in Europe, to MEPs in neighbouring countries affected by pollution upstream in the Danube, to the secretariats dealing with Greenpeace's legal dispute and the Hungarian government, to whom I was personally appealing. By enacting my protest, I was initiating a process of '*subjectification*' (Rancière, 2004: 35), whereby I was moving from a state of passivity and invisibility representative of the *demos*, to the emancipated role of an active democratic subject.

As a body of work, *Almásfüzitő: An Index* is interesting to consider because of how of how the audience was restricted in the process of disseminating this body of work. In his analysis of Jacques Rancière's concept of the 'politics of aesthetics', Stephen Wright discusses the visibility of art and its capacity for engendering dissensual activity. Although Wright expresses admiration for Rancière's conceptual schemata on the whole, he takes issue with Rancière's assertion that the 'aesthetic regime <sup>27</sup> of art' (Rancière, 2006: 20-31), i.e. the dominant culture of art as displayed in museums and galleries, depends on mass visibility to produce *dissensus*. Instead, Wright asserts just the opposite by claiming that in order for art to be truly dissensual, it must 'forego its coefficient of artistic visibility' (Wright, 2008), and operate outside of the gallery system, in locations where the art object resists commoditisation. Wright therefore identifies a paradox in the development of an environmentalist photographic practice – whilst the function of the photograph in the documentation of industrial pollution is predicated upon ensuring that incidents of industrial pollution become 'visible', a truly dissensual artistic practice must remain 'invisible' to institutions and the art establishment.

Whilst the audience of my initial protest was limited to twenty individuals, the subsequent ruling of the EU Commission against the Hungarian government, and in favour of Greenpeace, ensured that the environmental concerns raised by my publication were proved legally valid. The claims that I had made in *Almásfüzitő: An Index* took on a different dimension in the aftermath of the EU Commission's favourable ruling, with the result that the history of the original protest became integrated into the second edition of the book (published this time under the banner of Environmental Resistance). Whilst my collaboration with Greenpeace had ensured that a licence similar to the one granted to

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<sup>27</sup> Martin McQuillan makes an interesting observation concerning the translation of the word 'regime' into English when he notes:

In French the word is considerably more elastic and while referring to a political order it can also be used to mean a 'settlement' [*régime matrimonial*], grouping [...] diet/regimen or in the case of rivers and engines flow, rate, rhythm or speed, all of which might suggest a more porous concept of aesthetic distribution (McQuillan, 2011: 167).



TATAI would most likely never be issued in Hungary again, our campaign had not succeeded in bringing about remedial action at Almásfüzitő. This partial victory has ensured that my commitment to the environmental problems on-going at Almásfüzitő remains open-ended <sup>28</sup>.

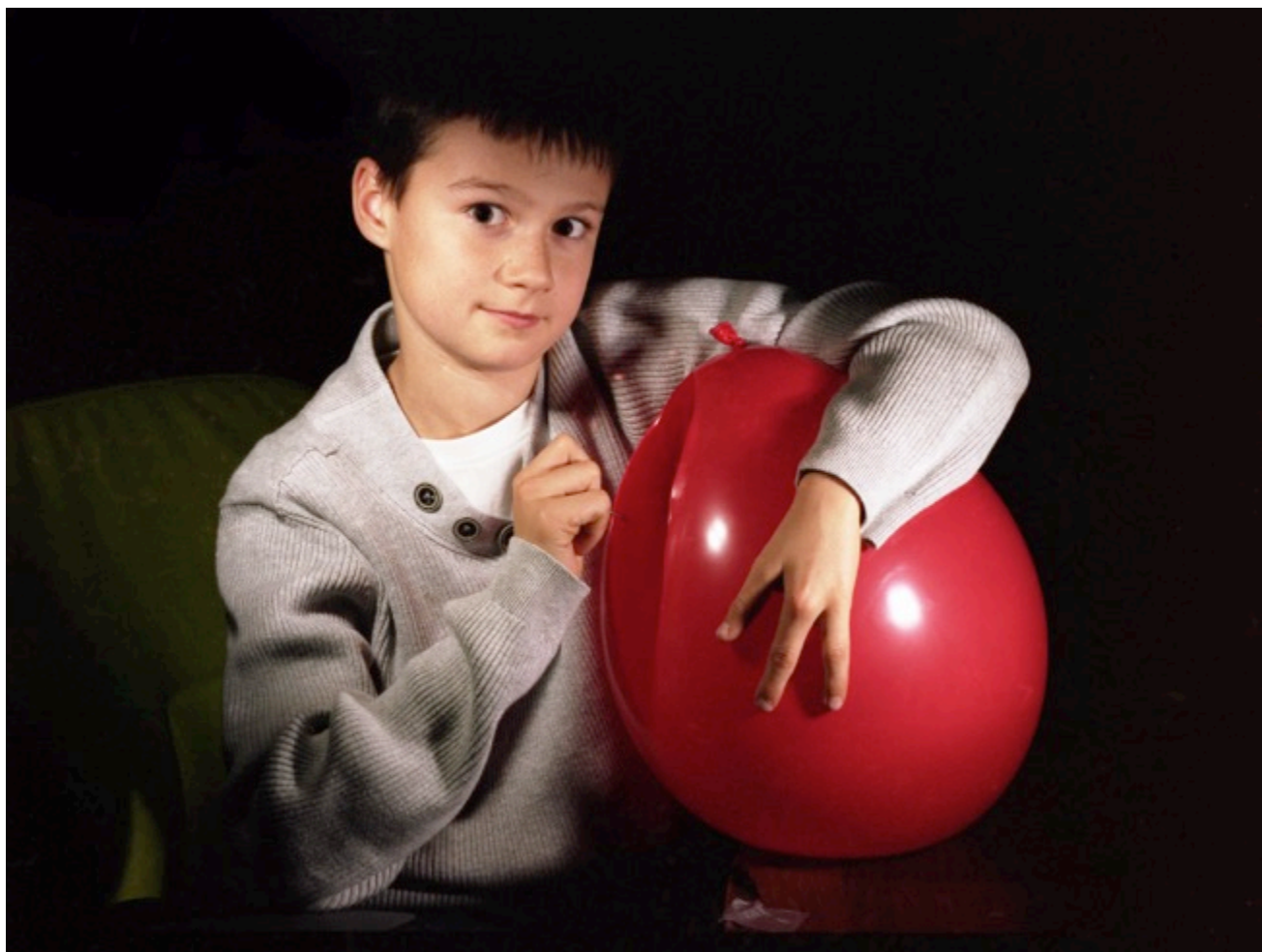


Fig. 39. Mark Neville, photograph taken from the series *Deeds Not Words*, (2011).

Although I was not aware of the project at the time, my decision to restrict my audience to twenty individuals who had a professional interest in the on-going legal case brought by Greenpeace, Hungary, against the Hungarian government for their issuing of the TATAI licence at Almásfüzitő, bore resemblance to the strategy of dissemination

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<sup>28</sup> The second edition of *Almásfüzitő: An Index* is significant because it demonstrates that political and environmental developments occurring in the aftermath of the publication can be included in subsequent editions of the book. The ability to revise, update and amend a publication was an opportunity that Misrach denied himself when he failed to confront congress with his proposal for a national park. The various prevarications, denials or ill-tempered responses that doubtless would have characterised congress's reaction to his proposal could have provided an excellent basis for revisiting the project.



employed by the photographer Mark Neville in his 2011 project *Deeds Not Words* (Neville, 2014). Neville's project represented an attempt to bring about awareness of the health implications suffered by the people of Corby in Northamptonshire, England, because their houses were built upon the toxic landfill of a steel works, which once occupied the site in the 1980s (Fig. 39). It is significant that Neville chose to use the medium of the photobook to provide an overview of the on-going problems associated with industrial pollution at Corby. Neville's self-published book *Deeds Not Words* was dispatched to '433 local authorities in the UK, and to environmental agencies internationally, [in order] to raise awareness of issues around the handling of toxic waste and the reuse of contaminated land' (Neville, 2014). Furthermore, Neville's motivation for creating *Deeds Not Words* also concerned a court case brought by a group of Corby residents (the 'Corby 16'), whose children suffered birth defects as a result of persistent pollutants emanating from underground at Corby.

Unlike *Almásfűzitő: An Index*, which concentrated upon documenting a site where industrial pollution is evident in the landscape; Neville's photographic series examines Corby as an active community whilst also documenting individuals who exhibit birth defects, with the result that Neville's photographs fall within the genre of portraiture or the social documentary tradition. It is important, however, to consider how Neville utilises the photobook format as a means of conveying the complex environmental health issues at play within the Corby community. In a description of the *Deeds Not Words* publication, Neville describes how his photographs are heavily contextualised by supporting texts:

The book is distinctive in that it is not simply a 'photo book': half the book comprises a section, entitled 'Words Not Deeds', with a brief history of the rise and fall of the steel industry, an exploration of the strong identity that migrant Scottish workers in the steel plant forged around them, and a detailed exploration of the Corby 16 court case, including more than 20 pages of scientific evidence concerning the link between chemical pollutants and birth defects (Neville, 2014).

Rather like *Almásfűzitő: An Index* and my subsequent project *No Al Carbone, Brindisi*;

Neville's *Deeds Not Words* also situates the photograph within a multimodal context, demonstrating a clear commitment to 'informing the audience' about the health implications of building on contaminated land. In Neville's case, this is done by combining qualitative photographic 'evidence' of congenital birth defects in the community's inhabitants, with quantitative scientific 'evidence' affirming the claims to knowledge made by the publication. Furthermore, by conveying something of the town's rich industrial and cultural heritage, Neville insures that the reaction of the audience is not pity for the people of Corby, but instead one of empathy and a sense of injustice.

The essential point to take away from my comparison with the *Deeds Not Words* project is Neville's concept of how the audience for his project was conceptualised. At the point of dissemination in 2011 <sup>29</sup>, Neville's *Deeds Not Words* corresponded to Stephen Wright's notion of an 'invisible' artistic practice (Wright, 2008) operating outside of the gallery system. Using Wright's reading of Rancière's concept of the 'politics of aesthetics', it is possible to argue that *Deeds Not Words* dissensual potency lies in Neville's decision to distribute the photobooks solely to a targeted group of individuals, who shared a direct professional interest in the environmental health problems highlighted by the publication. Neville is forthright about his political motivations as an artist when he comments that his aim was 'to effect a real policy change [and] alter the attitude towards the disposal and management of toxic waste in the UK' (Neville, 2014). It is precisely this commitment to 'informing the audience' about the plight of the Corby people, in order to 'intervene' (Rancière, 2004: 25-6) and reconfigure the future direction of public policy making, which ensures that Neville's project is significant as an example of how a photographer can promulgate the values of environmental activism within the cultural sphere.

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<sup>29</sup> *Deeds Not Words* was subsequently displayed as a gallery exhibition at The Photographers' Gallery, London, running from August 2nd to September 29<sup>th</sup>, 2013. Even on this occasion, Neville made a commitment to engaging in an advocacy process by accompanying the exhibition with a symposium that sought to examine government policy regarding the use of contaminated land. This symposium was organised by environmental activist group 'ClientEarth' and resulted in a manifesto, which was presented to government (Neville, 2014).

#### 4:4 Multimodality as Representational Strategy

The project *Mynydd Parys & Afon Goch* differs significantly from *Almásfűzitő: An Index*, because the Afon Goch Amlwch River has been leaching minerals into the Irish Sea since the Industrial Revolution. The origins of industrial pollution at Mynydd Parys therefore pre-date contemporary notions of environmentalism or the environmental regulation of industrial companies by the state. Perhaps more importantly, the Parys Mine Company, which was largely responsible for excavating Mynydd Parys at the end of the 18<sup>th</sup> century, has long since ceased to trade, and all of the individuals concerned are dead. The location of *Mynydd Parys & Afon Goch* therefore represents a clear-cut case of industrial pollution; however, unlike the example of *Almásfűzitő* there is no one left alive to blame for the creation of the environmental problems at Anglesey.

Even though *Mynydd Parys* is an historic problem, I originally took the point of view that the UK government must share some responsibility for not diverting the funds required in order to tackle the issue of abandoned metal mine pollution, not only in Anglesey, but in innumerable locations across England and Wales. Taking into consideration that the UK government has already pledged to make a £327 million financial commitment to remediate the UK river system by 2027, in order to meet the environmental standards required for *The European Water Framework Directive* (2000), it appeared at the outset of the project that government departments such as the Environment Agency would be a natural audience for a postal protest in the style of *Almásfűzitő: An Index*.

The possibility of conducting another postal protest was thrown into disarray by the disclosure of a vital piece of information, which I was not aware of when I was photographing and gathering mineral samples on location. My scientific partner Dr. Will Mayes of CEMS, University of Hull, informed me that in 2007 a company named as Siltbuster Ltd. had been commissioned by the Environment Agency (EA) to create a model filtration machine. Siltbuster's trials successfully demonstrated that between 96-99% of the

metal content of the Afon Goch water channel could be extracted by the filters in their machine, and that the pH balance of the water could also be neutralised (Younger & Potter, 2012). In a lecture given in 2012, Professor Paul Younger notes that Silbuster's full-scale filtration plant would cost an estimated £1.5 million to construct and a further £250k to maintain on an annual basis thereafter (ibid.). At the time of writing, Younger intimates that the Welsh assembly has put plans for the filtration plant out to tender, but that no date has been given for the completion of the project (ibid.). Although I had no thoroughgoing proof that the Afon Goch Amlwch River would be remediated in the near future, the possibility that a filtration plant might be built ensured that a postal protest was pointless. For this reason, *Mynydd Parys & Afon Goch* is a project that has yet to be disseminated.

In an attempt to redefine the purpose of the *Mynydd Parys & Afon Goch* project subsequent to the Silbuster disclosure, I make a plea in the introductory essay of the publication (see Appendix iii), for state regulators to factor into the projected profitability of future mining operations costs associated with remediating the landscape after work has ended. This is because the example of *Mynydd Parys & Afon Goch* demonstrates that the state has yet to find the cost of remediating historic incidents of industrial pollution never mind budget for contemporary damage to the environment caused by active mining operations. Whilst this change in direction rescued the project, I also must admit that *Mynydd Parys & Afon Goch* can be judged a failure from an environmentalist perspective because my capacity to attribute blame to the individuals responsible for polluting the environment was thwarted by the historic nature of the *Mynydd Parys* mine, and because I failed to understand from the outset that UK authorities had proposed a remedial solution.

If *Mynydd Parys & Afon Goch* represents a protest that was never enacted, the project is of greater interest because of the problems associated with attempting to overlay environmental science data within the frame of the photograph, as a form of multimodal display (Fig. 40) The integration of the data overlays in three-page gatefolds within

*Mynydd Parys & Afon Goch*, represents an attempt to ‘transform political intent into semiotic form’ (Kress, 2010: 121). The combination of qualitative and quantitative ‘evidence’ of industrial pollution, which was provided by the photography and the mineral sampling analysis, was intended to provide a totalising discourse, capable of influencing audience opinion in their ethical judgments about the sites profiled, and minimising criticism or hostile reactions against the publication’s claim to demonstrate the existence of pollution in the locations documented. In this respect, the design of the infographs was an important aspect of the *Mynydd Parys & Afon Goch* concept, because it allowed for an empirical claim to knowledge to be made <sup>30</sup> with the aim of pre-empting criticism that the photographic ‘evidence’ of pollution was speculative, unfounded or even adulterated.

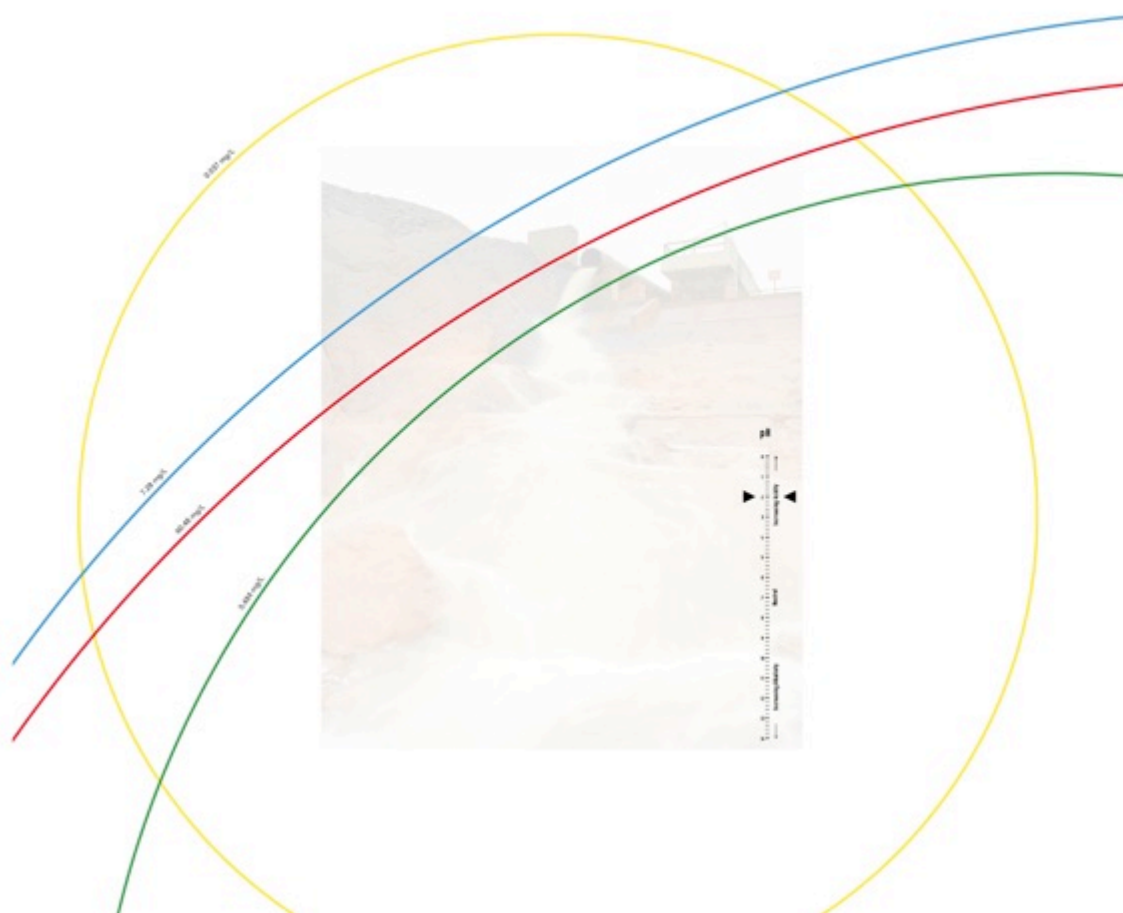


Fig. 40. Conohar Scott for Environmental Resistance, gatefold detail, *Mynydd Parys & Afon Goch* (2014).

<sup>30</sup> It is important to realise that the data I collected on location was independently tested under laboratory conditions at the University of Hull, and can be published in scientific journals.

The problems associated with attempting to combine photography and scientific and/or ecological data in *Mynydd Parys & Afon Goch* can be usefully compared to Richard Misrach's attempts to undertake a similar task in his most recent publication *Petrochemical America* (Misrach & Orff, 2012), which he made in collaboration with the landscape architect Kate Orff. The subject of *Petrochemical America* is 'an industrial corridor' (Misrach & Orff 2012: 131) of the Mississippi river in Louisiana, which produces 'a quarter of the nation's petrochemicals' (Misrach & Orff, 2012: 17). The extensive nature of the petrochemical pollution throughout this 150-mile section of the Mississippi is reflected in the local nickname for the region, 'Cancer Alley' (ibid.).

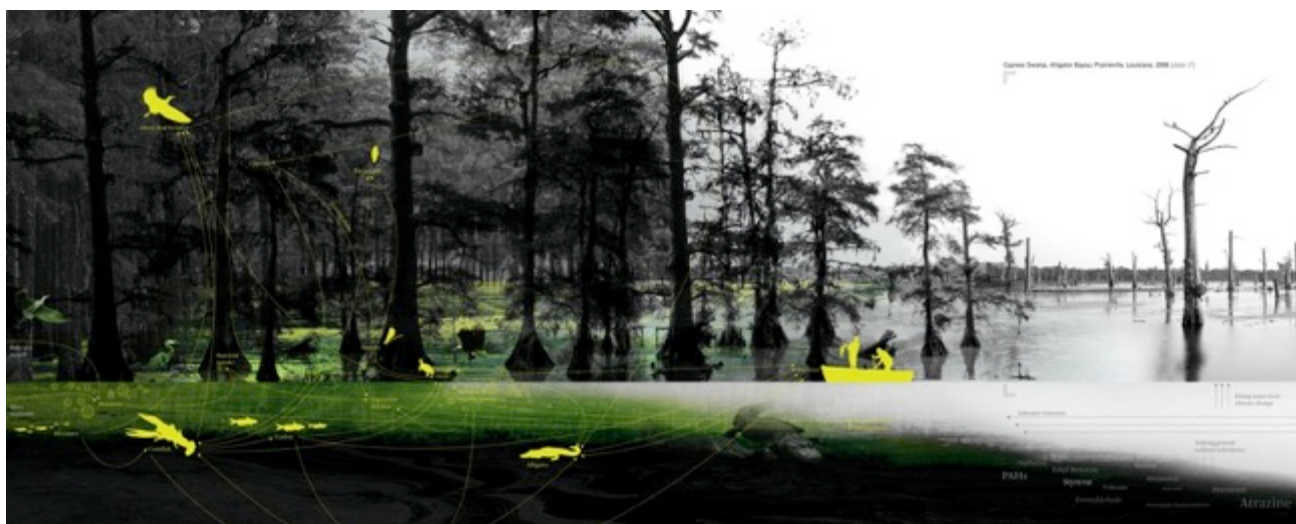


Fig. 41. Kate Orff, *Requiem for a Bayou*, taken from *Petrochemical America* (2012).

In an interview with the artist Ruth Dusseault, Misrach reveals that when he first began to photograph 'Cancer Alley', his initial concept was to repeat the 'National Park idea' (Misrach, cited in Dusseault, 2000), which had formed the basis of *Bravo 20*. The fact that Misrach was considering repeating 'National Park: A proposal' provides further credence to my argument that *Bravo 20* represented a failed opportunity to directly engage in protest with the US Congress. Upon meeting Orff for the first time, however, Misrach was persuaded to allow Orff the opportunity to add 'layers of maps, graphs, and illustrations [in] a type of visual narrative called a throughline' (Misrach & Orff, 2012: 17), which could be imposed on top of Misrach's photographs of 'Cancer Alley' (Fig. 41).

*Petrochemical America* is an interesting publication to compare to *Mynydd Parys & Afon Goch* because of how Misrach and Orff attempted to combine their artistic specialisms within the context of the photobook. The first half of the publication proceeds in the traditional format of a photographic monograph, with Misrach's photograph on the right side of the spread, accompanied by a title/caption on the left, which in some instances is very brief (only the title), whilst on other occasions the caption is a paragraph long. By comparison, Orff's contribution forms the basis of the second half of the publication, entitled *Ecological Atlas* (Misrach & Orff, 2012: 113). Here, Orff takes Misrach's photographs and subjects the images to computer-rendered diagrammatic overlays (Fig. 41), which illustrate a series of timelines showing the degradation of an ecosystem due to industrial pollution. Whilst Misrach allows Orff to render her illustrations over his images, it is significant that on each occasion Misrach's photographs appear as a stand-alone bona fide work of art in the preceding section.

Interestingly, whilst Misrach has shown throughout his career that he is willing to collaborate with practitioners from other disciplines, Misrach as a photographer has remained loyal to the specificity of the medium – his photographs are never combined with other modal forms. Such a move would have profound implications for Misrach because at the very instant the photograph incorporates another mode into its boundaries; it ceases in the ontological sense of the term, to be strictly a photograph. To begin to integrate the photograph with other forms of representation is therefore to step out of the canonical tradition of photography and into the transcategorality of a post-conceptual artistic practice, which is predicated upon 'a conception of the photographic as the domain of the *image* in general' (Osborne, 2013: 127).

Unlike Richard Misrach, Andreas Müller-Pohle's *The Danube River Project* does move beyond the specificity of the photographic medium to include a small band of white text, denoting mineral sample readings, which are located at the bottom of his photographs

(Fig. 31). As I have argued previously in section ‘3:4 The Informed Audience I’, Müller-Pohle’s readings represent the bare minimum of textual information required to denote the Environmental Quality Standards (EQS) for each mineral, and without a corresponding key – located beyond the photograph – denoting upper safe limits for each mineral, the inscriptions hold no scientific value. If a comparison is made with the wealth of ecological information afforded by Kate Orff’s throughlines, it is possible to argue that whilst photographers such as Richard Misrach or Andreas Müller-Pohle are interested in situating their imagery within an environmental science context, they are circumspect when it comes to altering the appearance of the photograph to any great extent.

My commitment to the concept of ‘the informed audience’ necessitated that I move beyond Müller-Pohle’s minimal intrusion into the photograph’s surface and attempt to integrate the mineral sample results taken from the Afon Goch River, not only with the photograph, but also with the EQS values as ascribed to each mineral. This act was ethically important to my practice as I felt that each photograph had to be accompanied by all of the information required in order for the audience to discern that the pollutants present on location exceeded the upper safe limits for that ecosystem (Fig. 30). It was therefore my aim to present each triptych as a sign, which was resistant to reinterpretation, if the accompanying EQS information was not immediately to hand – as is the case with Müller-Pohle’s images. The size of the circular overlays on the canvas was critical in this regard, as they provided the audience with a comparative spatial illustration of how the sample results were vastly in excess of the accepted EQS limits for the Afon Goch watercourse.

It is ironic that in the creation of the gatefold design I found it difficult to overlay the infographic data i.e. the large circumferential lines of the mineral sample results, with the photograph, without detracting from the aesthetic qualities of the image. Understandably, a balance must be sought between the necessity to ‘inform the audience’ of environmental issues on the one hand whilst simultaneously retaining the capacity of the photograph to



act as a form of indexical ‘evidence’ capable of eliciting an emotional response from the audience – both are essential qualities in the visual information advocacy process. For this reason, a second pale ‘trace’ of the photograph was reproduced as a means of sidestepping the problem of how to integrate the infographic with the photograph. In hindsight, this solution represented an evasion of the challenge provided by Kate Orff’s throughlines, which overlaid Richard Misrach’s photographs of ‘Cancer Alley’. Using Kate Orff’s collaboration with Misrach as an example, it is perhaps worth taking into consideration the notion that a photographer may be too emotionally involved in the process of representing his/her photographs to carry out this task successfully. The example of Orff therefore poses the question of just how far photographers should be prepared to relinquish ‘control’ of their photographs to graphic designers, and other artistic collaborators, in order to further the process of visual information advocacy <sup>31</sup>.

From the perspective of an environmental scientist, the circular overlays in *Mynydd Parys & Afon Goch* are of interest because they suggest that data, normally displayed by scientists in the format of an EXCEL spread sheet, can undergo a process of ‘translation’ (Kress, 2010: 124) from one modal form to another. The process of translation suggests that art can add value to scientists’ attempts at engaging the public and stakeholders i.e. representatives of governmental agencies who make policy decisions, in supporting the case for remedial strategies to be put in place. The task is, however a tricky one. As the Tactical Technology Collective observe, ‘the challenge is much greater than just the problem of representation and beautification [...] We need to find concise ways of telling stories that strengthen the information we’re trying to get across by presenting it well *and* [my emphasis] beautifully, but without dumbing down the issues’ (Tactical Technology Collective, 2014: 76).

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<sup>31</sup> In the ‘Methodology’ section the term ‘visual information advocacy’ is defined by the Tactical Technology Collective as the process whereby ‘advocates and campaigners collect information that they can then use strategically to influence policy and public debate, expose wrong-doing, push for justice, monitor those in power and regulate public institutions (Tactical Technology Collective, 2014: 12).

#### 4:5 Collaborative Working Practices

Environmental Resistance can be described as an artist-led environmentalist group, which benefits from the diverse skills of its members. The decision to assume the identity of a collective was important because it had the advantage of shifting the emphasis away from a model of practice, which promoted the individual artist as author and producer of work, to one that emphasised collaborative agency between participants. This change of identity was necessary because the decision to collaborate with an environmental scientist and a graphic designer brought about a situation whereby I felt the contribution of other authors ought to be acknowledged in some way. Once the decision was agreed upon, an ethical justification for the organisation could be formally defined, which led to the development of a mission statement, in effect answering the question which I posed in the Introduction to the thesis – ‘*why* photograph?’ –:

Environmental Resistance is a UK based collective currently comprised of specialists in photography, environmental science and graphic design. Our work is carried out on a not for profit basis with funding and in-kind assistance mainly deriving from educational institutions and grants for the arts. The objective of Environmental Resistance is to protest against incidents of industrial pollution in the landscape. We also campaign for corporate responsibility towards the environment and for the remediation of polluted spaces. Our projects are undertaken on a unilateral basis or in partnership with environmental activist networks. Using the combined skills of our members we aim to educate, promote and provoke in order to improve the visibility of the environmental struggles we are representing (Environmental Resistance, 2014).

The establishment of a collective identity was a response to what I perceived as a discrepancy in the *Bravo 20* publication. In the marketing of the publication, Richard Misrach’s name was emblazoned in bold on the front cover, whilst the contribution of Misrach’s partner is referred to in a smaller font that was not emboldened. Furthermore, it is only in reading the acknowledgements that the contribution of additional third party authors is listed at all. As Michel Foucault notes, the display of an author’s name provides a

discursive and ‘classificatory function’ (Foucault, 1969), which helps to situate the author into a canon and can aid in the promotion and commoditisation of the work. Whilst I acknowledge that Richard Misrach’s reputation as an artist helped to direct public attention towards the activists’ struggles in Nevada, I also felt that the collectivist ethos of the project was hindered by the privileging of the artist, which served to undermine what John Holloway describes as the “‘Amorosity” (amorosidad)’ (Holloway, 2010: 41) of social bonds, which emerge from the processes involved in working with activists.

My reference to Environmental Resistance as a collective is problematic because it invites comparison with the history of artists’ collectives, which arguably emerges with Art & Language in the 1970s, continues with groups such as PAD/D (Political Art Documentation and Distribution) and Group Material in the 1980s, and is continued in the present era by groups as diverse as, The Future State, Platform, Superflex and Multiplicity, to name but a few. To discuss the history of artists’ collectives in the level of detail that the subject deserves is beyond the scope of this thesis, however, it is also important to offer a description of Environmental Resistance in comparison to the artists’ collectives mentioned above. In the first instance, Environmental Resistance is not *yet* an artists’ collective: Will Mayes is an environmental scientist, Emma Ward is a linguist and Victoria Redman worked under my instruction in the process of designing the photobooks and infographs, although she did enjoy a degree of conceptual autonomy as a graphic designer. I have therefore maintained editorial control over all the work we have produced thus far.

The advantage of having a diverse range of specialists working together is obvious; as The Critical Art Ensemble (1998) observe, it is very difficult for any one individual to possess the range of production skills and techniques necessary to fully address certain projects. Moreover, the advantage of possessing a range of specialisms within a group is borne out by the development of an artistic ‘practice that defies specialization (and hence pigeonholing)’ (Critical Art Ensemble, 1998: 74-5). The addition of a linguist into

Environmental Resistance, for example, ensured that it was possible to publish the *No Al Carbone, Brindisi* publication bilingually. The accommodation of this extra specialism made sure that the project was relevant to an Italian audience but it also created the possibility of disseminating our practice to an increasingly diverse audience – *No Al Carbone, Brindisi* could now be discussed with linguists, environmental scientists, activists and the artistic community.

In *Collective Action: Environmentalism in Contemporary Art Practice* (2013), Jade Williamson argues that present-day environmental concerns such as Global Warming, have increasingly led artists to collaborate with a diverse range of individuals and communities – scientists, engineers, IT experts, community interest groups etc. – in a bid to find innovative solutions to pressing environmental problems. Williamson argues that such collaborative experiments have the potential to realise Joseph Beuys' notion of 'ecological Gesamtkunstwerk' (Beuys 1988, cited in Williamson, 2013: 44), a term which Beuys coined to refer to his concept of a social sculpture, created by the democratic participation of a community acting in unison (Adams, 1992). In her appraisal of Joseph Beuys, I have sympathy for Williamson's claims that the ambition of environmental art ultimately extends beyond concerns with the art object itself, to encompass a wider communitarian shift towards the ethical values of environmentalism, which are founded upon modes of 'assembly and community' (Bookchin, 1986: 67).

In the creation of the Environmental Resistance photobooks, I was mindful of how the printed artefact was intended to function as an invitation to dialogue and as a point of departure for an extended debate on the remediation of the polluted topographies featured in the publications. As I have discussed in section '3:5 The Informed Audience II', meaning in *No Al Carbone, Brindisi* is anchored to a series of captions alluding to various scientific studies that point towards Brindisi having elevated rates of cancer, COPD and congenital birth defects, when compared to other regions in Italy and beyond. The scientific claims

made in the captions are affirmed by the use of QR codes situated at the bottom of the page, which point the reader to a web address, allowing access to the articles in full <sup>32</sup>.

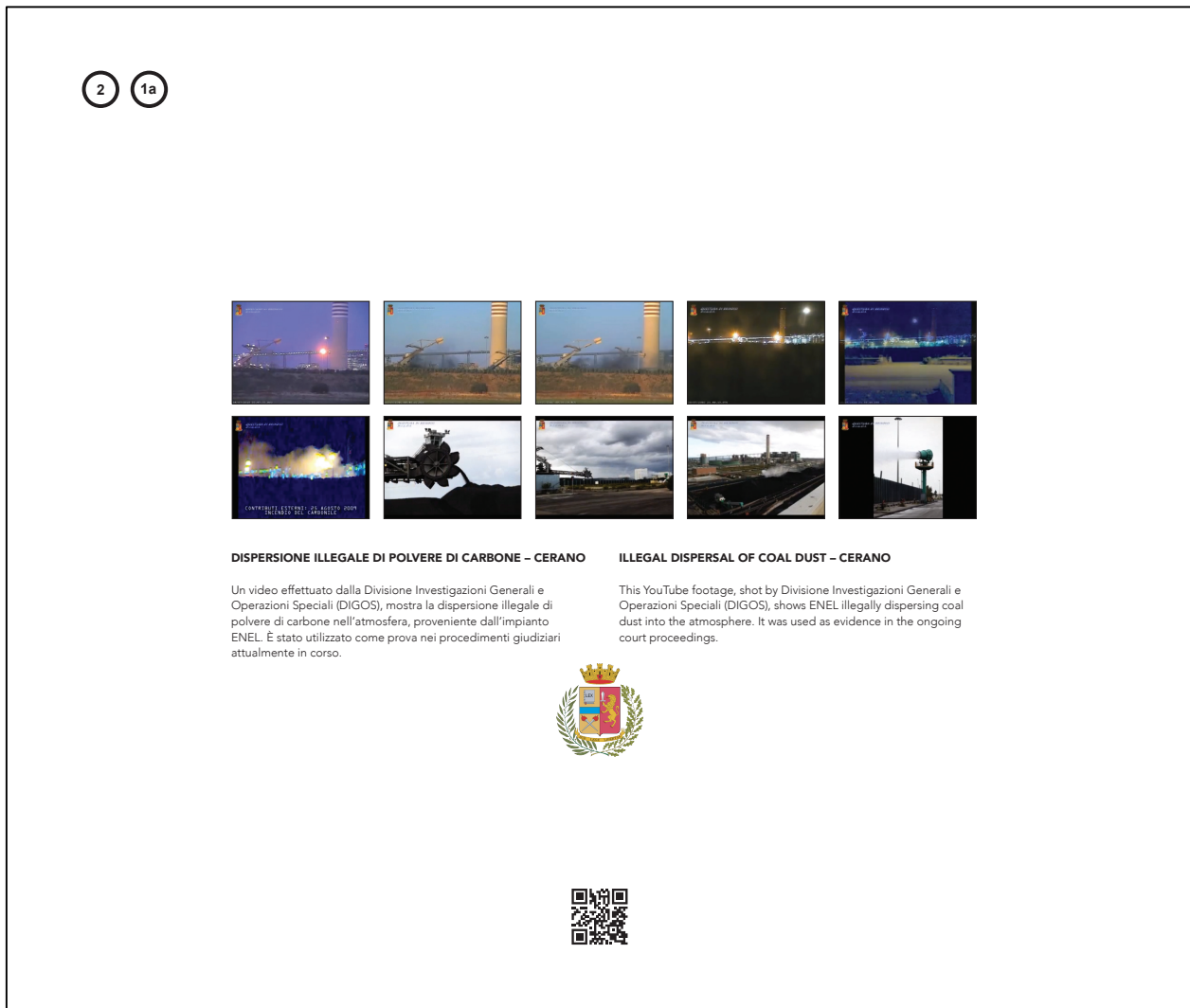


Fig. 42. Environmental Resistance, caption: *Illegal dispersal of coal dust, No Al Carbone, Brindisi* (2014).

The use of QR codes is an important aspect of the publication because this interactive feature was intended to empower the audience by enabling them to discover scientific data or additional sources of information for themselves (Fig.42). Such self-exploration effectively alters the status of the reader from an initial position of passivity to that of an active researcher. The QR codes dissensual power lies in their capacity to challenge *le partage du sensible* by introducing into the social sphere new accumulations of knowledge. One of the aims of *No Al Carbone, Brindisi* is therefore to raise awareness

<sup>32</sup> In the vast majority of cases, we tried to ensure that the QR codes pointed to web addresses that were accessible to the general public and did not require an Athens password or any other form of institutional access; however, on rare instances this was not possible.

concerning the existence of scientific texts, in order to widen participation in environmentalist discourse within the region. In this sense, *No Al Carbone, Brindisi* is a publication that exhibits a desire to engage in modes of social discourse, which is commensurate with Jade Williamson's definition of 'environmental art' (Williamson, 2013).



Fig. 43. Conohar Scott (second left) & Emma Ward (centre) of Environmental Resistance in conversation with Daniele Pomes (right) of No Al Carbone, on the 'Veleni Tour 2014'. Image courtesy of NAC (2014).

In my claims for the development of an artistic practice, which ultimately seeks to transcend an individualised encounter with the aesthetic and instigate new forms of dialogue in the social sphere, I was aware that in my decision to work with the format of the photobook, I had elected to disseminate my practice in a medium that isolates the individual at the point of accumulating knowledge, even if the process of reading the publication stimulates debate thereafter. Taking this problem into consideration, I determined to work with No Al Carbone in order to make the process of encountering the publication an experience, which could lead to immediate social interchange and debate. In a previous collaboration with Vessel (2011), No Al Carbone had used the concept of a 'Veleni Tour' (a 'Toxic Bus Tour') (Fig. 43.) as a means of facilitating interaction and

discussion concerning the environmental health problems associated with the Brindisi industrial zone. Together, we decided to integrate the dissemination of the photobooks into the experience of encountering the zone, as part of a new ‘Veleni Tour 2014’.



Fig. 44. A passenger on the ‘Veleni Tour 2014’, using their ticket to download the *No Al Carbone* publication. Image courtesy of NAC (2014).

During the days prior to the event, individuals on the No Al Carbone mailing list were invited to download the photobook in PDF format, in the hope that each passenger was familiar with the contents of the publication before they arrived. On the day of the tour, passengers were issued with a ticket containing a QR code (Fig. 44), which enabled individuals not already familiar with the publication to view the photobook as the tour progressed. Additionally, copies of the photobook were to hand for the passengers of the tour and some of the scheduled points for disembarkation and discussion mirrored locations of the photographs e.g. the bus stopped adjacent to the fly-ash pond known as Micorosa (Fig.46). The process of viewing the *No Al Carbone, Brindisi* publication was therefore integrated into the experience of travelling through the Brindisi Industrial Zone.





Fig. 45. Cosimo Consales (the Mayor of Brindisi) receiving his copy of the *No Al Carbone* publication during the 'Veleni Tour 2014'. Image courtesy of NAC (2014).

Initially, we had planned to provide a significant number of the passengers with printed photobooks on the day of the tour, and for this reason the print run of the *No Al Carbone, Brindisi* publication was twice that of the other projects (edition of 50), with the copies divided equally between Environmental Resistance and No Al Carbone. On the day of the tour, however, No Al Carbone's photobooks were nowhere to be seen and it appears that individuals in the group kept their copy of the photobook for posterity. This example provides one indication of the difficulties involved in working with activist groups remotely. Even though my colleague Emma Ward acted as a translator and interpreter throughout the project, cultural differences and varying strategic objectives, which emerged between Environmental Resistance and No Al Carbone, inevitably lead to differences of opinion



between the two factions <sup>33</sup>.

On a positive note, the PDF downloads of the photobook, which were available on the No Al Carbone website, the hosting of the publication as viewed on the Environmental Resistance website (Environmental Resistance, 2014), and the modest number of printed copies available on the day; ensured that there was an awareness of the *No Al Carbone, Brindisi* publication as the tour progressed. In addition, five specifically targeted individuals were presented with the printed photobook on the day of the tour. They can be identified as:

Cosimo Consales (Fig. 45)

Sindaco di Brindisi

(Mayor of Brindisi)

Comune di Brindisi, Piazza Matteotti, 1, 72100 Brindisi

Emanuela Bruno

Ingegnere Ambientale (Environmental Engineer), ARPA Puglia

(Agenzia Regionale Per l'Ambiente)

DAP Brindisi, Via Galanti, 16 - Brindisi - 72100

Rosana Indiveri/Stefano Rossi

Direttrice ASL Lecce/Direttore ASL Brindisi (Respectively Directors of Health Service Lecce & Brindisi)

Rosangela Chirico

Artist and daughter of Donato Chirico. The Chirico family are pursuing a civil action against the company ENICHEM SpA, for the death of Donato Chirico due to prolonged exposure to toxic chemicals in the workplace.

Patrizia Colella

Preside di Scuola Superiore IPSIA Ferraris

(Istituto Professionale Industria Artigianato 'G.Ferraris')

(Headmistress of IPSIA Ferraris High School, Brindisi)

Via Adamello 18 72100 Brindisi

Significantly, the 'Veleni Tour 2014' marked the first occasion when the Mayor of Brindisi Cosimo Consales <sup>34</sup> (Fig. 45) attended a No Al Carbone event, which allowed some of the local activists an opportunity to address him directly and air their grievances. The event

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<sup>33</sup> I felt, for example, that the 'Veleni Tour' could have played host to more researchers and health professionals, at the expense of No Al Carbone activists who were already opposed to the status quo, but for No Al Carbone the tour represented an opportunity to gather in numbers.

<sup>34</sup> In Italy, the position of Mayor denotes the chief political representative of the region, unlike the UK where the role is more symbolic.

was also covered by a number of local journalists and the regional TV station ‘Studio 100’, all of which we gave interviews to. Even though the No Al Carbone activists and other unaffiliated passengers were able to discuss a range of issues with Mayor Consales on the day of the tour, the conversation that ensued was also indicative of the extent of the socio-political problems affecting the people of Brindisi.



Fig. 46. Conohar Scott for Environmental Resistance, *untitled, No Al Carbone, Brindisi* (2014).

In a conversation that was reminiscent of Jacques Rancière’s characterisation of how *la police* ensures the *le partage du sensible* by techniques of disorientation, and by the continual ‘circulation’ (Rancière, 2010: 37) and deferral of knowledge, the Mayor Cosimo Consales blamed his inability to take action against the petrochemical companies on a lack of scientific evidence. In turn, this claim was rebuffed by Emanuela Bruno of ARPA (the equivalent of the UK Environment Agency in the region), and when No Al Carbone proposed that the citizens pay for independent scientific tests in order to provide an independent legal basis for remedial action, they were informed by the Mayor that tests

conducted by third parties would be deemed legally inadmissible by the state. The situation had therefore reached an impasse – the state’s scientific evidence was judged insufficient to take legal action against industrial polluters in breach of EU regulations whilst at the same time the judiciary refused to recognise independently sponsored data, which may well implicate the same industrial polluters in the health problems affecting the region.

During the course of the ‘Veleni Tour 2014’, the photobook functioned as a means of visualising the polluted topography, which on many occasions was inaccessible to the passengers on the tour (Figs. 46 & 47). Upon closer reading of the *No Al Carbone, Brindisi* publication, some local people who were not overly familiar with the Brindisi Industrial Zone, expressed their surprise at some of the locations profiled in the publication. The Micorosa fly ash pond, which contains the toxic ash left over from the process of burning coal, provides one example of a polluted territory that is largely unknown to people in the region. This is all the more surprising considering that the fly ash pond represents a significant environmental problem – Micorosa was never constructed as a clay sealed basin so rather like the Almásfüzitő red mud ponds, it is leaching toxins into the ocean continually. Whilst the name of No Al Carbone (‘No Coal’) makes it clear that the group stands in opposition to the four coal-fired power stations in the industrial zone, the narrative progression of the *No Al Carbone, Brindisi* publication proved to be one of the most successful aspects of the project because it helped to reposition No Al Carbone as an activist group concerned with much more than simply opposing the presence of four coal-fired power stations.

If Jussim & Lindquist-Cock’s notion of ‘active propaganda’ is defined by the production of a photograph, which is primarily aimed at ‘modifying [the] opinions and attitudes’ of the audience (Ellul, 1973, cited in Jussim & Lindquist-Cock, 1985: 146-7), then the photographs of *No Al Carbone, Brindisi* fall into this category of description. From the outset, the *No Al Carbone, Brindisi* publication was created with the intention of

countering the hegemony that power companies such as ENEL enjoy within the Brindisi region. As the main employer in the area, companies such as ENEL have the capacity to symbolically define the boundaries of social discourse in Brindisi and divide up *le partage du sensible* in such a way as to minimise local opposition to their activities. This is done, for example, by taking school children on trips around their industrial facilities or by offering work placement schemes for teenagers and apprenticeships for school leavers.



Fig. 47. Daniele Pomes of No Al Carbone using the photobook to describe the Micorosa fly ash pond, which is located on the opposite side of the fence behind, during the 'Veleni Tour 2014'. Image courtesy of NAC (2014).

Provided that a hearts and minds campaign in local schools can be considered to be a type of corporate propaganda – terms such as 'greenwashing' have arisen to describe the claims of companies to be socially responsible and environmentally friendly – then *No Al Carbone, Brindisi* unashamedly seeks provide an opposition to such dominant forms of discourse. My intention from the outset was therefore to take a concerted political stance on the locations I photographed, however, I argue that the publication falls short of Jussim & Lindquist-Cock's description of 'active propaganda' in one crucial respect: *No Al Carbone*,

*Brindisi* does not provide the audience with an overt ‘direction for action’ (Jussim & Lindquist-Cock, 1985: 147). Instead, the audience is encouraged to become active researcher-participants in the on-going struggle for environmental remediation. It is precisely the capacity of art to act as a ‘non-polemical’ (Rancière 2010: 119) framing tool, for the articulation and transmission of *dissensus*, which makes the photobook a medium suitable for the realisation of Rancière’s conception of ‘politics’.

In their argument for a successful politically engaged artistic practice, Aaron Gach & Trevor Paglen argue that cultural producers should work ‘side-by-side with politically aligned organizations in a manner which strives towards common goals without sacrificing artistic or organizational autonomy’ (Gach & Paglen, 2003: 1). The justification that Gach & Paglen provide for their assertion is that ‘it is highly unlikely [...] one person could develop and implement a political/activist campaign by themselves’ (ibid.) I argue that *No Al Carbone, Brindisi*, and the work of Environmental Resistance generally, can be regarded as an example of the collaborative and organisationally autonomous working model, which Gach & Paglen propose. The photobooks of Environmental Resistance can therefore be considered as an attempt to articulate the many ‘small narratives’ (Rancière 2011: 9), which constitute Jacques Rancière’s conception of ‘politics’ as a form of direct and unmediated democratic action, enacted within the social sphere. Intentionally, the Environmental Resistance publications were intended to function as a moment of ‘*resistance*’ (Rancière, 2010: 173) against the privations which capitalism exerts upon the political subject. In the case of the residents of Brindisi, such privations may well include the contraction of cancers or other profoundly disturbing health problems, associated with living in close proximity to a petrochemical zone, which is four times greater in size than the city of Brindisi itself.

## 4:6 Conclusion

Throughout this final chapter, I make a claim for a form of politicised artistic practice, which draws heavily upon the writings of Jacques Rancière and his theories concerning the reciprocity that exists between aesthetics and politics. Using Rancière's conceptualisation of the 'politics of aesthetics' (Rancière. 2004: 25), I argue that the mimetic act of constructing art objects and disseminating them can be considered to be a form of democratic and participatory 'politics', which is commensurate with Murray Bookchin's libertarian values of social ecology.

In a bid to answer my second research question – 'How can photography be used as a means of conducting environmental protest?' – I have argued for a model of artistic practice based upon collaboration, which is evident in my decision to work as part of the artist-led collective Environmental Resistance. Moreover, the fact that specialists in environmental science, graphic design, linguistics and photography populate Environmental Resistance, underscores our commitment to rigorous scholarship in the photobooks we produce and enables us to address diverse audiences in the dissemination of our work.

Using the various accounts of how I disseminated my practice within the identity of Environmental Resistance, I argue that the multimodal medium of the photobook has the potential to alter the subjectivity of the audience, by introducing into the social sphere new accumulations of knowledge, which advocate the need for environmental remediation. In my description of how I posted the *Almásfűzitő: An Index* to number of politicians and EU bureaucrats, in my work with environmental scientists, and in my participation in the 'Veleni Tour 2014', which was conducted in partnership with the activist group No Al Carbone, I make a case for the capacity of the photobook to instigate new forms of dialogue.

It is precisely this intervention to the configuration of the social, which provides the basis for my argument that photography – specifically through the medium of the photobook – can be utilised as a novel form of environmental activism. I therefore argue that the Environmental Resistance publications represent a non-polemical, and unmediated form of communication, capable of producing ‘*dissensus*’ (Rancière, 2010: 173) in the social sphere, which has the capacity to reconfigure *le partage du sensible* (Rancière, 2010: 36) through the medium of aesthetics. It should be noted, however, that paradoxically there is a price, which has to be paid for maintaining a politicised photographic practice that aims to make the phenomena of industrial pollution visible; as Stephen Wright suggests, in order for art to maintain its dissensual power, it must ‘forego its coefficient of artistic visibility’ (Wright, 2008) and operate outside of the gallery system.

## Thesis Conclusion

In an interview with the artist Ruth Dusseault, Richard Misrach makes an insightful comment, which is equally relevant to my practice when he states:

You have asked me earlier about my environmental activism; most people ask me if I think my photographs actually have any impact. You can't measure that stuff, but my intuition tells me that it's part of the larger public discourse. These things resonate; they send waves out there. They add to the way people talk and think about things. It does help even though sometimes it's frustrating because you can't measure it (Misrach, cited in Dusseault, 2000).

In the final evaluation of my practice, I share Misrach's frustration at the inability to quantitatively measure the impact that art can have in the social sphere, but I also share Misrach's belief in the dissensual possibilities offered by the use of photography in the struggle for environmental remediation.

The case of *Almásfűzitő: An Index* demonstrates Misrach's point clearly. One of the problems that the publication raises, is the impossibility of knowing if my postal protest had succeeded in altering the behaviour of any of the government officials involved. An angry phone call from the Hungarian Secretary of State to a civil servant, or a word between colleagues in one of the EU bureaucracies targeted, could be regarded as a positive outcome for my practice, and yet such private moments will never be known. It is therefore possible that it may take many years to determine if this research project has succeeded in altering the way in which people think about photography and the environmental problems, which beset the locations I have documented. This thesis asked more of the photographer than this, for it questioned if photography could be considered as a form of environmental activism in its own right. Furthermore, in my first research question, I also asked if there was such a thing as an environmentally ethical photographic practice:



## What are the ethical implications of photographing industrial pollution?

My attempts to answer my first research question initially proceeded from an opposition to the sublime in the photographic documentation of mining operations, specifically an environmentally damaging hydraulic gold mine, operated by the North Bloomfield Mining & Gravel Company at the end of the 19<sup>th</sup> century. This mine was documented by Carleton Watkins, whose signature approach to photography ingeniously blended his commercial objectives as a photographer with the sensibilities of an artist documenting the American frontier. In my reading of Watkins' sublime, and its enduring influence on contemporary artists – most specifically Edward Burtynsky – I argue that the capitalist origins of the 'industrial sublime' make it unsuitable for addressing environmental issues in the present era.

I agree with Denis Cosgrove's (2003) assertion that the sublime signifies a perspectival domination over the natural world, which I argue is incommensurate with the ethics of environmentalism. As Joshua Schuster (2013) observes, it is significant that in Burtynsky's photographs of the 'industrial sublime', the audience are kept at a distance and in a position of ignorance about the locations photographed. I therefore reject Burtynsky's assertion that his photographs form 'an open-ended narrative' (Burtynsky, cited in Campbell, 2008: 43), that amplifies 'environmental concerns' (ibid.) associated with mining. Furthermore, I also argue that Jennifer Peeples' (2012) appraisal of Burtynsky in her concept of the 'toxic sublime' is overly optimistic in its claim that viewing Burtynsky's photographs can lead to a fresh awareness concerning 'the need for alternative resource and waste protocols and decision-making' (Peeples, 2012: 388). This analysis has led me to conclude that as a photographer concerned with constructing a photographic practice, which is commensurate with the ethical values of social ecology, I should not employ the 'sublime' in my work. In practice, I found it difficult to consistently execute 'the activist's perspective' due to the size of the structures I was photographing or practical difficulties in gaining access to sites.

My opposition to the ‘industrial sublime’ resulted in attempts to construct a counter-aesthetic approach, by establishing what I have described as an ‘activist’s perspective’, which is to say a perspectival viewpoint that attempts to place the audience into the role of an environmental activist infiltrating a site, in order to implicate an industrial polluter. Necessarily, this involves photographing industrial pollution from the ground and at close quarters. In my conception of ‘the activist’s perspective’, I initially drew upon the proto-reductivist style of the ‘Clinch’ photographs, which eschew the pictorial elegance of J.A. Todd’s images, in favour of an approach to the polluted topography that is less preoccupied with aesthetic forms of representation, and more concerned with gathering visual ‘evidence’ of industrial pollution in situ. In subsequent projects, however, I abandoned my attempts at proto-reductivism and began to make a distinction between beauty, as a quality of the image, and how the image was situated within a multimodal context.

My discussion on aesthetics centred upon making a categorical distinction between Kant’s concept of beauty as a ‘disinterested’ (Kant, 2000: 91) quality of an image, and what I define as the ‘ugly subject matter’ of industrial pollution. By making a differentiation between beauty and ‘the ugly subject’, I was able to argue for the ethical co-existence of beauty and ugliness in a singular image because I argue that both qualities are not relativistic to each other. Of importance in my argument was the distinction drawn by Mark Cousins’ (2009) in his comparison between dirt as a form of social taboo, and ‘ugliness’ as a non-aesthetic phenomenon. Here Cousins’ argument stipulates that the dirtiness of dirt i.e. it’s ‘ugly’ qualities, has more to do with the realisation that matter i.e. pollutants, which are in the ‘wrong’ place or present in ‘unnatural’ and disproportionate quantities.

My justification for the role of the ‘photographer’ as an environmental activist can only be substantiated if the concept of the photographer is extended in order to accommodate an open-ended and reflexive form of practice, which moves beyond the ontological boundaries of the photograph, in order to incorporate multimodality. I

therefore make a claim for a form of photographic practice, which is indebted to the trans-categorality of 1960s conceptual art practice, in which it is difficult to define what Peter Osborne describes as ‘the borders of the work’ (Osborne, 2013: 142). Furthermore, in my return a preoccupation with aesthetic quality in the image, which is evident in my use of the large format camera, I claim that my practice shares a post-conceptual emphasis on ‘quality’, which Jeff Wall alludes to in his more recent commentaries (Wall & Osborne, 2008).

The conceptual shift in my practice towards multimodality is crucial because from the moment I move beyond the ontological specificity of photography, and begin to work collaboratively with a range of different media, I make a claim for a politicised form of practice, which is founded upon the ethical obligation of the artist to ‘inform the audience’ about the nature of the pollutants present at a given locality. It therefore follows that my concerns for the establishment of an ethical photographic practice, as outlined in my first research question – ‘What are the ethical implications of photographing industrial pollution?’ – are inextricably related to my efforts to satisfy my second research question:

How can photography be used as a means of conducting environmental protest?

In chapter 3, I make two claims in a bid to justify that my photographic practice is ethical. My concept of the ‘the activist’s perspective’ represents my first claim to commensurability with the ethics of environmentalism. My second claim rests upon the notion of ‘the informed audience’. The desire to combine qualitative data (i.e. the photograph), and quantitative data (i.e. mineral sample analysis, scientific studies etc.) of industrial pollution into the multimodal photobooks I produced was designed to provide a scholarly basis for my claims concerning the need to ‘inform the audience’ about the need for environmental remediation. The ethical and political motivation behind this process was to minimise scepticism concerning the capacity of the photograph to act as a means of ‘evidencing’ industrial pollution – it was never my intention to become embroiled in a

debate concerning the photograph's indexical authenticity. From the outset, I was clear that the photograph needed to be contextualised by additional modal forms. Moreover, I argue that the photograph *alone* can never hope to demonstrate the whole range of pollutants present at any given location, which may be invisible to the naked eye and present in quantities so small that they must be measured in µg/Kg. My ethical commitment to informing the audience concerning the full gamut of pollution present within a given location necessitated the development of a multimodal form of practice, in which meaning was organised within the extended canvas of the photobook.

The double or triple page spread of the book format allowed for a classification of modal forms i.e. captions, infographs and QR code links, which could be counterpoised against the aesthetic qualities of the photographs. In each of the three projects, the presence of accompanying text plates offered a means of side-stepping the dilemma of whether or not to make reductivist images by expanding the boundaries of the art object, so that the photograph became integrated into the overall design of the publication – this is especially evident in the triptych format of the *Mynydd Parys & Afon Goch* publication. This extension of the canvas had the advantage of 'anchoring' (Barthes, 1977) meaning in the photograph due to the confluence of modes, which are properly external to the photograph. In my concept of 'the informed audience' I argue that I situate the photograph in what Walter Benjamin would term as 'the context of living social relations' (Benjamin, 1973: 87), and as such I establish a political context within which the photograph can function.

I argue that the presence of new and unmediated forms of knowledge, conveyed through the aesthetic medium of the photobook, is described by Rancière's conception of 'the politics of aesthetics' (Rancière, 2004: 25). As such, I claim that my ethical obligation to informing the audience about the pollutants present at a given location, which is expressed by using multimodality, leads to the Rancièrian realisation of 'politics'. In this

way, my two research questions are inextricably linked to one another. The photobooks I have created can therefore be regarded as an attempt to constitute a form of ‘*resistance*’ (Rancière, 2010: 173) against the privations which capitalism exerts upon the political subject through the communicative possibilities offered by the aesthetic medium. As Stephen Wright observes, however, the price of maintaining a cogent politicised practice is that art must forego its ‘visibility’ in art institutions and operate instead within the social sphere.

My desire to raise awareness concerning the need for environmental remediation in the locations profiled by the Environmental Resistance photobooks, proceeds in the first instance from an interaction with a small and ‘invisible’ audience, who was contacted by post – here I refer to the *Almásfűzitő: An Index* project. My commitment to situating my practice in the social sphere is exemplified by my encounter with the residents of Brindisi on the ‘Veleni Tour 2014’, when the *No Al Carbone, Brindisi* photobook is used as a means of navigating the Brindisi Industrial Zone. I claim that what both projects share in common is a belief in a form of ‘active democracy’ (May, 2008), in which the artist and the audience share an intellectual equality, which presupposes that citizens have the right to participate in decisions, which affect the health and well-being of communities and the environments which surround them.

It is significant that I began my research working in collaboration with Greenpeace, but using my own name, and finished by working under the banner of the artist-led collective Environmental Resistance. Without the expertise of my co-authors and their skills in graphic design, interpretation & translation and environmental science, I could not have hoped to produce the photobooks I did. Whilst it is true that Richard Mischak successfully demonstrated the collaborative potential of working with activist networks in his *Bravo 20* publication, I argue that in the process of becoming an artist-led collective, I moved beyond the model of the photographer as the author and sole producer of art, which

in Misrach's case failed to acknowledge the full complement of authors who contributed to the *Bravo 20* project. As Gach & Paglen (2003) argue, it is unlikely that an individual acting in isolation could possess the knowledge required in order to implement an activist campaign. The importance of working collaboratively with existent power structures in the localities I documented, as well as working collectively within the Environmental Resistance group, therefore cannot be underestimated as a means of ensuring that my political objectives were realised.

The act of reaching out and acquiring mineral samples from Mynydd Parys had profound implications for my practice because it required the need to work collaboratively with other experts in order to interpret and organise the scientific data I had gathered; this development necessitated the formation of Environmental Resistance as a coherent group. The advantage of working as a trans-disciplinary collective was that it enabled a variety of specialists – a graphic designer, an environmental scientist, a photographer and a linguist – the opportunity to participate in the process of designing the photobooks, which enabled us to effectively address a diverse audience that extended beyond the artistic community.

A second benefit to the formation of the collective was that we could develop our own identity as a group, which had the potential of working side-by-side with other activist groups such as No Al Carbone, whilst maintaining autonomy in our design processes and overall objectives. This model of collectivity is proposed by Gach & Paglen, (2003) and it is significant because it prevents the photographer from acceding creative autonomy by permitting activist groups the rights to situate the photographic image in whatever context they deem appropriate. Furthermore, I argue that by generating our own scientific data, Environmental Resistance has the potential to offer a 'service' to activist communities by utilising the equipment and expertise, which is available within the institution of the university.

Within the university sector, the *Mynydd Parys & Afon Goch* photobook is of particular interest to the environmental science community, who understand the communicative possibilities offered by synthesis of environmental science and photography. Environmental scientists are often in the position of trying to convince governmental agencies on the need for environmental remediation; in such circumstances, the opportunity to photograph the polluted topography using sophisticated imaging techniques, and then combine this indexical representation of the landscape with fresh and innovative ways of interpreting scientific data, can provide environmental scientists with a renewed case for securing investment in remedial processes. Furthermore, the use of a multimodal approach in the documentation of environmental pollution can be of value when it comes to engaging the general public in environmental science – it is common for large scientific grants to have a small proportion of the total budget ring-fenced for this purpose. The potential to work with environmental scientists in order to develop further the representational strategies explored in this thesis represents the concept of visual information advocacy’ (Tactical Technology Collective, 2014) in action and it gives credence to my claim for a model of photographic practice, which is commensurate not only with environmentalism but with environmental science as well.

Although the *Mynydd Parys & Afon Goch* project was never publically disseminated through the course of this research project, the concept of the infographic overlays combined with the photograph represents a future direction for research because I have secured funding from the Leverhulme Trust for 2014-15, as a Leverhulme Artist in Residency at the Centre for Environmental and Marine Science (CEMS), University of Hull. I will therefore have a placement with Dr. Will Mayes (my partner in Environmental Resistance), which will allow us to expand the *Mynydd Parys & Afon Goch* project in order to document multiple locations across England and Wales. I argue that through the process of working in collaboration with the scientific community, I can achieve the aims of environmental protest i.e. to address environmentally damaging behaviours and instigate

remedial action, by alternate means.

One future direction for research relates to diversifying my practice, so that I might extend my documentation of the polluted topography from the still photograph to moving image. Doing so would allow me the ability to capture sounds from location, document on-going acts of industrial pollution, or pan the camera within a given space, in order to provide the audience with a greater appreciation of the topography in context. Furthermore, I am also interested in conducting narrative research with activists I am working in partnership with, or inhabitants in the locations I am actively documenting. Through the process of diversifying my artistic output in this way, it could become possible to consider the work of Environmental Resistance as a burgeoning archive, which could either be physically held in a depository or disseminated online. In turn, theoretical considerations concerning the nature of the archive could lead to comparisons with other artists or collectives who are engaged in visual archive research.

Lastly, a further future direction for scholarly research that has emerged from the process of writing this thesis concerns the use of photography in the history of environmental protest within the USA, which I argue can be traced back to 19<sup>th</sup> century practitioners such as J.A. Todd and 'Clinch'. The fact that much of this imagery lies in archives digitised and unpublished, suggests that research in this area is under-represented. The opportunity to investigate further the function of photography in a proto-environmentalist context would be helpful in arguing for an alternative history of photographic representation, which runs antithetical to Watkins' pro-capitalist sublimity, would do much to reposition photography as a technology which is equally capable of promoting environmental ethics as it is advertising on behalf of capitalism.



## Appendix

### *i. Correspondence with Christine Hult-Lewis 04/11/2012*

Re: JA Todd  
Hi Conohar,

I am so glad you are pursuing the argument you lay out below — I agree completely, and in fact would have discussed Burtynsky in the conclusion of my dissertation had my advisor not felt it was too distracting. I would love to read more of your work, and discuss things further.

I can answer certain of your questions rather quickly.

The Pioneer Photographers of the Far West” book contains an entry on Todd, but only reproduces a studio portrait; no landscape images.

I have of course seen the 17 images in the Calif Historical Society, and they are larger than the cabinet cards reproduced in the National Archives link, and the imagery is not the same. The Todd images at CHS are also dated, and were taken at two distinct times: Nov & Dec 1882, and Sept. 1883. The images in the NA link are later. I sent you a jpg of my diss. Image under separate cover. Sadly I do not have any more (this one was rather expensive to get), but I do have descriptions of the images and really pathetic, childlike drawings of them. (The drawings are total rubbish, but they do help me remember more or less what the image looks like).

--I’m also uncertain about who the “Respondent” is—is that Woodruff, or the North Bloomfield group? In my notes on the case, Woodruff is listed as the “Complainant” and North Bloomfield, et al are the “defendants.”

I have never heard of “Clinch,” but I found two links relating to Clinch photography from Grass Valley. (Clinch is not included in the Palmquist book)

One link from a recent auction suggests that “Clinch” was the name of the company and not a specific photographer.

[http://www.icollector.com/Grass-Valley-CA-Nevada-County-c1900-Clinch-and-Company-Mercantile-Photograph\\_i9799028](http://www.icollector.com/Grass-Valley-CA-Nevada-County-c1900-Clinch-and-Company-Mercantile-Photograph_i9799028)

However, a link from a different Ebay auction shows clearly that there was in fact a photographer named W.A. Clinch of Grass Valley.

<http://www.auctiva.com/hostedimages/showimage.aspx?gid=205113&ppid=1122&image=449877684&images=449877684,449877704&formats=0,0&format=0>  
<<http://www.auctiva.com/hostedimages/showimage.aspx?gid=205113&ppid=1122&image=449877684&images=449877684,449877704&formats=0,0&format=0>>

I will conclude now — would love to talk more again!

Best,  
Christine

ii. *Almásfűzitő: An Index*, contextual information



Fig. 48. Environmental Resistance, front cover design, *Almásfűzitő: An Index*, 2<sup>nd</sup> Edition (2014).

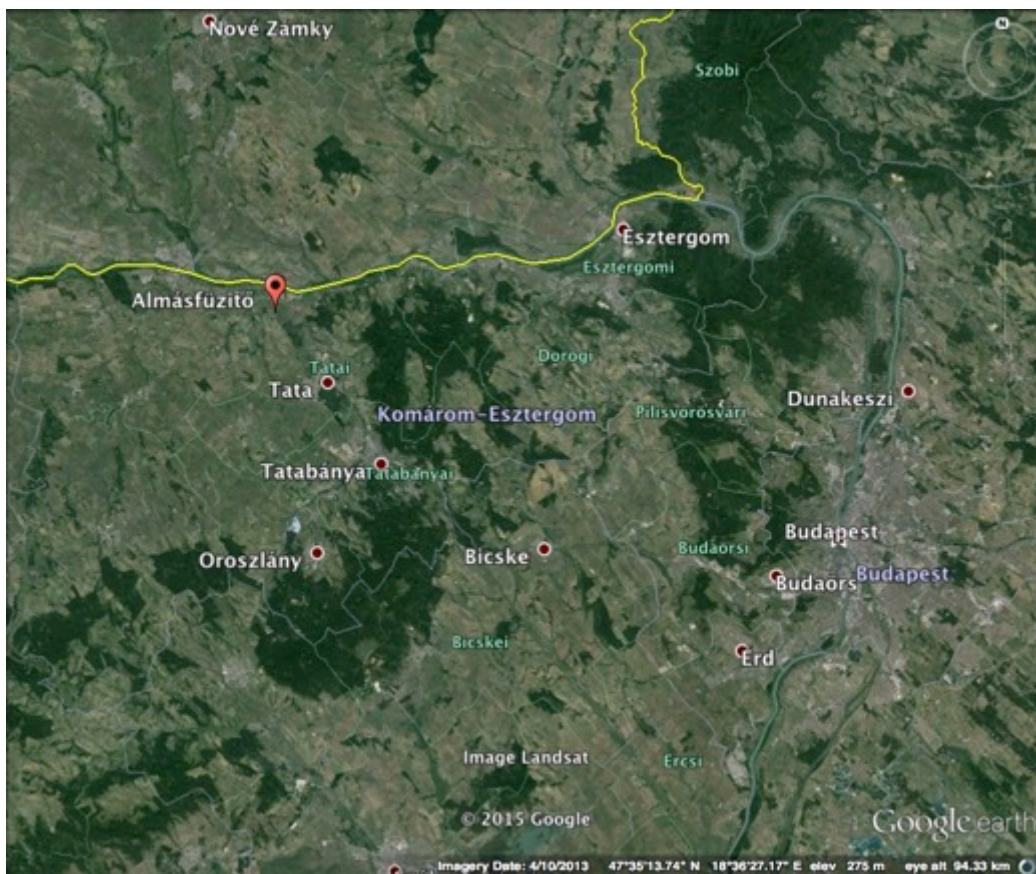


Fig. 49. Map showing the location of Almásfűzitő in Hungary, courtesy of GoogleEarth (2014).



*Almásfüzitő: An Index* (Fig. 48 & 49) was a project made in collaboration with Greenpeace, Hungary. Shot on location over the course of just two hours on a Sunday, in May 2011, when the operation was closed and the workers absent, the resulting images were composed covertly, in defiance of security and CCTV on site (Fig. 50). Greenpeace had gained access to the complex on previous occasions, in order to take mineral samples from within the perimeter of the plant; my entry into Pond 7 was the first time a photographer had documented the interior of the TATAI waste disposal operation. Prior to shooting on location, I had visited Greenpeace, Budapest, in order to view helicopter footage of the site and obtain local knowledge concerning how best to approach the problem of entering the compound. Although work at the TATAI plant had ceased on Sunday and Pond 7 had no perimeter fence, the boundaries of the site were protected by guards patrolling in cars and by a CCTV operator, working from the main office. The challenge was obviously to enter



Fig. 50. Conohar Scott, Google Satellite map showing my path of entry into Almásfüzitő Pond 7 (in blue) and the location of the stationary security guards (in yellow).

and leave the location without being observed and apprehended. In order to gain entry, I chose to walk from the main highway onto the banks of a small river, which offered the

protection of tall reeds. Using the reeds for camouflage, I was able to arrive at the banks of Pond 7 unnoticed, whereupon I had to move quickly until I was afforded the protection of the prisms. Once inside the labyrinth of prisms, I was able to work unobserved although I could not tell if operatives were working just around the corner. The operation was conducted in an adrenalin-fuelled rush; during the two-hour period that I remained within the TATAI compound, I continually weighed up the merits of working for longer or retreating before I was discovered. Due to the time pressure I was under, the project was shot on a 35mm digital camera, which enabled me to have confidence that the photographs were captured successfully before I left the location.

In the weeks that followed my entry in Pond 7, I constructed the first edition of the *Almásfüzitő: An Index* publication. This book was limited to twenty copies, which were dispatched to a number of scientists, politicians and EU regulatory bodies, in an attempt to raise the profile of Greenpeace's forthcoming legal action (see '4:3 A Postal Protest'). At the time in 2012, Greenpeace had just begun to take legal proceedings against the Hungarian Government, in order to establish that the TATAI licence contravened EU law concerning the safe disposal of industrial wastes. The text plates, which accompany my photographs of the interior of the TATAI waste repossessing operation, illustrate the breadth of the licence granted to TATAI by the Hungarian Government. In the first edition of the *Almásfüzitő: An Index* publication, a preface outlined the environmental threat posed by the Almásfüzitő alumina ponds. This preface is repeated in full below:

Built during the Soviet Occupation of Hungary in 1950, the Almásfüzitő Aluminium Factory operated until as recently as 1997. Using archaic manufacturing and storage technologies that are regarded as "absolutely unsuitable today"<sup>(1)</sup>, the plant deposited some 12 million tons of red mud, an industrial by-product from the process of refining bauxite ore into aluminium, into vast ponds at the Danube's edge. Historically, the seven alumina ponds at Almásfüzitő were created without the provision of a sealed base. Worse still, the area is prone to seismic activity and tidal fluctuations. Rather than safely housing the red mud, the unsuitable nature of the Ponds' structure ensures that 'red springs' leak into the groundwater reserves on the Danube's banks; it has been calculated that in 2010 alone, 405,384m<sup>3</sup> of water and toxins leached through the soil into the Danube.

Red Mud has an alkalinity of pH12 and contains highly poisonous metals such as arsenic and mercury. It is evident from the disaster in Devecser, Hungary 2010, that red mud can cause severe caustic burns to skin and have a catastrophic effect on ecosystems, especially marine life. The Almásfüzitő ponds lie directly adjacent to the banks of the Danube, an area that has been designated by the EU as being a Natura 2000 site – a protected zone for wildlife. It therefore follows that the pollutants emanating from the Almásfüzitő ponds, and into the Danube, represent a significant threat to the river's ecology, and also to the human food chain, in all countries down-stream of Almásfüzitő

If this situation was not worrying enough, in April 2011 the Hungarian Environmental Protection Authority granted a company, named as TATAI, a licence to blend 166 toxic wastes and a further 244 non-toxic wastes into the red mud of Pond 7, with the mere addition of some topsoil. The amount of waste granted by the licence totals 132,000 tons/pa, and equates to a daily average of 360 tons per day. Independent and verified scientific tests have shown that this method of waste disposal, known as *composting*, is “wholly inappropriate” (*ibid.*) for the great majority of non-organic wastes permitted, which do not biodegrade. Consequently, the operation at Almásfüzitő would *seem* to contravene both Hungarian and EU law regulating the disposal of industrial wastes.

This publication is a protest against the environmental ‘crimes’ and needless pollution taking place at Almásfüzitő, in the name of profit and greed. The text which follows has been lifted from TATAI’s licence, granted by the Hungarian Environmental Protection Authority. The purpose of the text is to illustrate the astonishing variety of toxins, which the company are “legally” entitled to ‘compost’ into the earthen prisms at Pond 7.

The codes listed in the following text are standardised across the EU. As a guide, two digit codes such as 01 are waste category headings. Four digit codes, such as 01 04, refer to category subheadings. Six digit codes, such as 01 04 11, signify the individual categories of waste permitted in the licence. Furthermore, codes with an asterix\* refer to wastes which are deemed to be toxic. At Almásfüzitő, the toxic and non-toxic wastes can mix and react together with unpredictable results. We have therefore decided to make no distinction between the various categories of waste. The continuous stream of the text can therefore be considered as being analogous to the flow of pollutants, which leach into the Danube each and every day. <sup>(1)</sup> All facts and figures in this passage are the product of an independent scientific review commissioned by Greenpeace, Hungary. The report was written by Professor Karl Lorber, who Heads the Institute for Sustainable Waste Management and Technology (IAE), in Austria. Professor Lorber’s expert findings concerning waste disposal at Almásfüzitő can be found by using the QR code:



(Environmental Resistance, 2014b)

After my protest was complete and the books were dispatched, it would be another two years before the results of Greenpeace's legal case was announced.

#### GREENPEACE PRESS RELEASE

##### Hazardous waste management at Almásfüzitő breaches EU law

Budapest, 22 November 2013 – Based on the initiation of Greenpeace Hungary, the European Commission announced yesterday that they have opened infringement proceedings against Hungary because of the waste management at the Almásfüzitő red sludge reservoir. Greenpeace welcomes this decision. Since all Hungarian authorities refused to act, Greenpeace had no other choice than asking Brussels to help defend the Hungarian environment and the Danube.

At the village of Almásfüzitő, right next to the Danube bank, the Hungarian company Tatai Környezetvédelmi Zrt.(TKV) has been receiving permits for more than 20 years to cover the red mud with a mix of hundreds of thousands of tons of hazardous and other wastes. Ironically, this waste treatment was labelled as “composting”, even though large parts of the hazardous waste are of an inorganic nature: at best, it is waste dilution by mixing. The reservoir is bordering a Natura 2000 protected Danube bank area. The company has not succeeded over the course of 20 years in covering the entire 163 hectare surface of the red mud.

Greenpeace's waste management expert stated that no real composting processes take place in the reservoir. Mixing more than 160 different kinds of hazardous wastes – including wastes with heavy metals –, and depositing them to an improperly sealed reservoir significantly increases the environmental risks. It is obvious that in the long term, the deposited toxic substances will end up in the environment, in the ground water and in the Danube.

Greenpeace started its campaign in 2011 against this serious environmental threat. During the past years, several Hungarian authorities have been asked to act against this law-breaching activity. Since the national authorities had refused to act, Greenpeace initiated an EU infringement at the European Commission in January 2012.

“All waste management activity shall fulfil EU and Hungarian legislation on environmental and health protection. We believe that the activity of TKV violates several laws. Their permit, issued in 2010, seriously infringes the EU and domestic legal requirements related to Natura 2000 sites by failing to examine the likely significant effects. Furthermore, the permit does not comply with the requirements of hazardous waste management. We believe that the Commission's decision on the infringement justifies our concerns”, said Gergely Simon, regional toxic expert of Greenpeace CEE.

Zsolt Szegfalvi, director of Greenpeace Hungary, added: “Greenpeace expects that as a consequence of the infringement procedure, Hungarian authorities will suspend the dangerous activities at the Almásfüzitő reservoir, so the Commission will be able to close down the procedure”

(Environmental Resistance, 2014a).

### iii. Mynydd Parys & Afon Goch, contextual information



Fig. 51. Environmental Resistance, front cover design, *Mynydd Parys & Afon Goch* (2014).

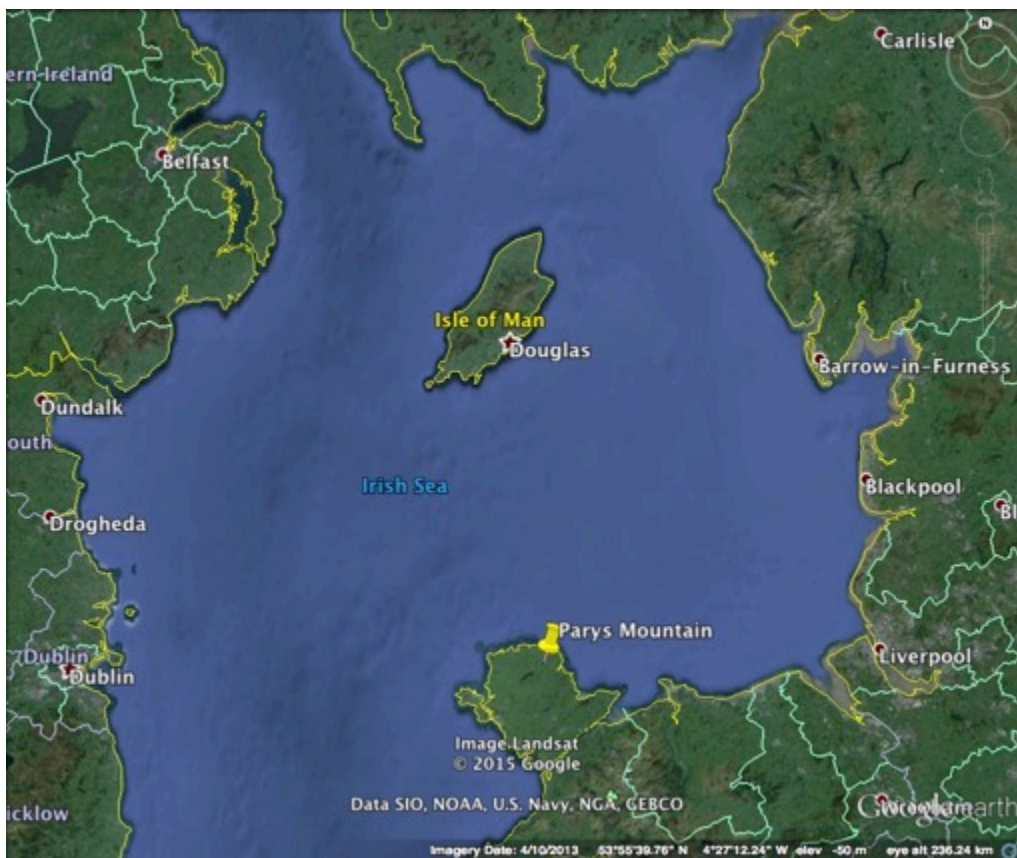


Fig. 52. Map showing the location of Mynydd Parys & the Afon Goch River, Anglesey, Wales. Image courtesy of GoogleEarth (2014).

The follow-up project to *Almásfűzitő: An Index* was entitled *Mynydd Parys & Afon Goch*. As the Mynydd Parys (Pary's Mine) (Fig. 51 & 52) is an abandoned mine, which is now open to the public, I encountered no problems with gaining entry to this site and was not under any time pressure. The fact that I had open access to the locations I intended to document encouraged me to return to the large format camera system, which I had missed using in the *Almásfűzitő: An Index* project. Without the technical challenge of manually adjusting and exposing sheets of film, I felt that my role as a photographer was somewhat diminished. However, I also had issues with the letterbox format of the 35mm format, which I felt was too inflexible. In the *Mynydd Parys & Afon Goch* publication, the artwork was accompanied by an introductory essay, which explained the environmental problems associated with this location, and provided an historical overview of the mine. For readers of this thesis who do not have access to the photobook, this essay is reproduced below:

The title *Mynydd Parys & Afon Goch* is a reference to two distinct but inseparable locations, situated on the island of Anglesey, north Wales. The Afon Goch Amlwch River (or the 'Red River Amlwch') is a small 'ecotoxic' (Younger & Potter, 2012) water channel, not more than a few feet in width, which is formed from leachate that gathers in the underground tunnels of the historic copper mine Mynydd Parys (or 'Parys Mine'). Emerging in the lower slopes of Parys Mountain (which is little more than a hill, standing 147m above sea level), the Afon Goch Amlwch River flows on land for some two kilometres, before passing through the town of Amlwch and into the Irish Sea. This small watercourse provides 'the single largest source of copper entering the Irish Sea' (Younger & Potter, 2012) with the result that the Afon Goch Amlwch River is one of the most highly concentrated toxic water channels in the UK. Although Mynydd Parys ceased to be an active copper mine at the end of the 19th century, and is now a recreational area popular with tourists and locals alike, the mine's great opencast pit and its subterranean network of tunnels create the conditions necessary for leachate to form the Afon Goch Amlwch River, making this industrial relic 'one of the most polluting mines in the UK' (Mayes et al., 2009).

For a brief period in the early decades of the 19th century, Mynydd Parys and the adjoining works of the Mona Mine became 'the world's most productive copper mine' (Rowlands, 2002: 29). The copper extracted was primarily used to sheath the hulls of ships, protecting the timber from rot caused by worms and limpets. Additionally, the rich mineral ores extracted from the Anglesey deposits could also be utilised for a host of industrial applications, including the manufacture of pigments used in various inks, paints and dyes (Steele & Williams, 2010: 21). Most of the copper ore mined in Anglesey was shipped to the coalfields of Swansea or Lancashire, where it was refined by heating the ore in large kilns – a process known as smelting. During the early industrial period, Amlwch was also host to a number of smelting works, which had a remarkable impact on the surrounding landscape



because the process of smelting produced acrid clouds of acid rain. Not only did acidification of the atmosphere kill all plant life in the immediate area, local residents and miners frequently suffered from respiratory diseases such as silicosis and tuberculosis (Engels, 1845). Whilst today the great opencast pit at Mynydd Parys resembles a romantic ruin, it is worth remembering that to the 18th century visitor the vista of the mine would have appeared as a scene of total devastation – literally an ecological dead zone.

If the industrial process of extracting and smelting copper exploited the natural resources of the landscape to the detriment of life forms in the surrounding ecosystem, then the working conditions at Mynydd Parys were equally exploitative of the labour force. The miners enjoyed no fixed tenure of employment and were forced to auction their labour, with the lowest bid typically securing the right to work. This oppressive bargaining system ‘ensured that wages were kept to the minimum’ (Steele & Williams, 2010: 23); should a team of miners underestimate the costs required to excavate a face upon bidding for the work, it was the workers themselves who met the deficit. Furthermore, the miners were permanently indebted to their employers, having to pay upfront for tools and supplies (explosives, candles, fuses etc.), all of which were sold to them at a profit by the Parys Mine Company (ibid.). Throughout the first half of the 19th century, resentment over working conditions at Mynydd Parys was a continual source of unrest, leading to a series of strikes and violent rebellions in Amlwch, which on more than one occasion had to be suppressed by the state militia (Rowlands, 2002: 115-221). Murray Bookchin’s observation that ‘the plundering of the human spirit by the marketplace is paralleled by the plundering of the earth by capital’ (Bookchin, 1986: 85) is aptly demonstrated by the example of Mynydd Parys. Instead of regarding the great opencast pit as a romantic relic of the industrial past, the site should be more accurately understood as a place of suffering and a continuing source of pollution – a residual wound in the landscape.

The residents of Amlwch have, through the course of many generations, grown accustomed to the presence of the Afon Goch Amlwch River in the landscape. The river flows through the town; sometimes it passes invisibly, culverted by various shops and pubs. In other places, it meanders openly through housing estates, parks and gardens. Visit Amlwch and talk with the villagers there, and you will hear them joke about the ‘red river’. Some will tell you how they used to swim in the river as children, and that in the days after their clothes began to disintegrate. Others will laugh as they recall that when a child’s bicycle was no longer needed it was dumped into the river, whereupon it dissolved within a month. In 2007, Amlwch had a scare when it was discovered that a concrete drainage adit, which allowed leachate to flow from Mynydd Parys, had been closed off and subsequently abandoned when the mine ceased production late in the 19th century. For decades the adit had held fast under the pressure of the dammed water, which had risen to form a small lake within the pit of the great opencast. When local caving enthusiasts from (PUG) Parys Underground Group (2013) discovered the sealed passage, they quickly realised that if the adit gave way, it would flood Amlwch with devastating consequences. An emergency plan to drain the great opencast pit was undertaken by the Environment Agency (EA) and a range of other partners (Younger & Potter, 2012). Some 270,000m<sup>3</sup> of water was pumped from Mynydd Parys to alleviate the problem. Today, when tourists visit Mynydd Parys and stop to contemplate the tyres that lie at the bottom of the pit, they have little idea that this debris is all that remains of entire vehicles, which had been dumped into the lake of acidic leachate before it was drained.

The natural propensity of the rocks at Mynydd Parys to produce leachate from rainwater, resulting in a highly acidic copper sulphate solution which forms the basis of the Afon Goch Amlwch River, is an early example of the far reaching ecological consequences that mining can have on the environment. Whilst new technological and organisational forms of mineral excavation can generate capital in the short-term, the unacknowledged cost of environmental remediation may well prove to be a financial burden for future generations. Some 150 years after the decline of the Parys & Mona Mines, the Afon Goch Amlwch River continues to discharge significant amounts of pollutants into the Irish Sea (Cu: 10 kg/yr; Zn: 24kg/yr), including highly toxic substances such as arsenic and cadmium (Younger & Potter, 2012). To put this problem into context, Mynydd Parys is only one of some 200 metal mine sites strewn across England and Wales (Younger & Potter, 2012) (Mayes et al, 2009). Taking this into consideration, abandoned metal mines can be regarded as the most significant single source of metal pollution in UK river systems (Mayes et al., 2010) today. Moreover, it would be a mistake to regard the problem of metal mine pollution to be solely a result of rudimentary working practices common to the technologies of the Industrial Revolution and thereafter. Presently, the environmental problems exemplified by Mynydd Parys are being re-enacted on an amplified scale at mines in South America and South East Asia, to the greater detriment of the environment. Given that the consequences of mining during the Industrial Revolution continue to adversely affect river systems in the UK some 150 years later, one wonders how many centuries it will take to repair the environmental damage caused by contemporary mining activities?

Given that The European Water Framework Directive (European Commission, 2000) requires the UK to reduce its inputs of metal pollutants flowing into river systems before 2027, substantial new investment is required in order to develop and implement remedial technologies if this target is to be met. For the residents of Amlwch, their uneasy cohabitation with the Afon Goch Amlwch River may soon come to an end. In 2007, the marine technology company Siltbuster Ltd. successfully tested a pilot-scale water treatment facility, which extracted somewhere between 96-99% of the metals in solution, whilst the machine also neutralised the pH of the river water. However, with a further 200 sites across England and Wales still awaiting remediation, the environmental implications of metal pollution emanating from abandoned mines remains an issue of great urgency. Recent estimates put the cost of tackling this legacy of industrial pollution at £372 million (based on expenditure over an initial 10 year period) (Jarvis and Mayes, 2012). Given the severe nature of the metal pollution at sites such as the Afon Goch Amlwch River, the installation of expensive water treatment facilities which demand high levels of investment and energy to function, would appear to be the only viable solution. At less severely polluted sites, a number of environmentally sympathetic approaches are currently being tested with promising results. The use of reed bed filtration has been shown to be effective for treating coalmine pollution (Dean et al., 2013), though this approach requires a large landmass, which may not be available in steep upland mining areas. Some recycled industrial wastes can also be effective at filtering metals out of the water (Warrender et al., 2011); whilst treatment plants are being developed that harness the power of natural bacteria, transforming the dissolved metals into solid metal minerals, which could potentially be recycled (Gandy & Garvis, 2012). These new methods of remediation may well provide an energy efficient and cost effective solution to the problem of metal pollution emanating from abandoned mines.

The example of Mynydd Parys & Afon Goch can be considered a warning from history. The residual effects of metal mining can have far-reaching and costly implications for future generations. In the case of Mynydd Parys, it is clear that the financial burden of remediating the problems of environmental pollution caused by the Afon Goch Amlwch River is a debt that still remains outstanding at the outset of the 21st century. Isn't it about time that the cost of environmental remediation was factored into the projected profitability of mining operations prior to the commencement of mineral extraction?

(Environmental Resistance, 2014b)

iv. *No Al Carbone, Brindisi*, contextual information



Fig. 53. Environmental Resistance, front cover design, *No Al Carbone* (2014).

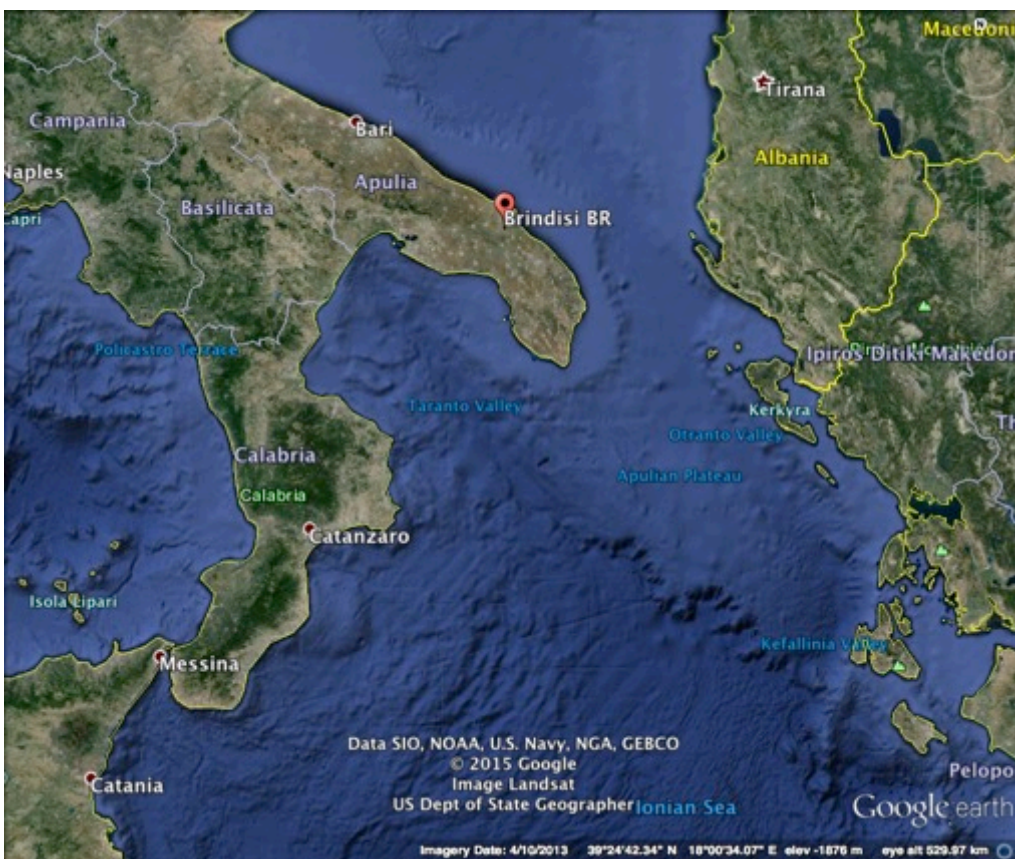


Fig. 54. Map showing the location of Brindisi, Italy. Image courtesy of GoogleEarth (2014).

The third and final project in this research study is named after a group of environmental activists from Brindisi, in Southern Italy. No Al Carbone (NAC) (2014), which means 'No to Coal' (Fig.53 & 54), have been active in their hometown for a number of years and can muster a membership in the low hundreds for significant events, such as large street protests. The organisation very successfully raises local awareness of the health problems associated with the four coal-fired power stations and various petrochemical works which constitutes the nearby Brindisi Industrial Zone. NAC are a well-organised group who have previously worked with arts organisations such as Vessel (2011), and have a very diverse approach to environmental activism.

After the historic nature of the *Mynydd Parys & Afon Goch* project, I was keen to place my approach to the documentation of the polluted topography into a live and politically charged context. The attraction of working with NAC was that we could realise the stated aim of Environmental Resistance (see 4:5 'Collaborative Working Practices') by producing a photobook, which could visualise the contested territory of the Brindisi Industrial Zone, and summarise the key scientific arguments in support of NAC's assertion that industrial activity was (1) damaging to the public health of the Brindisi people (2) in contravention of existing environmental standards. To this end, the publication was devoted to NAC, at the expense of our own logos and branding. The front cover was devoted entirely to the NAC uniform, which is a black t-shirt, and inside the organisation's manifesto was displayed at the forefront of the book, in the form of a Preface:

## NO AL CARBONE MANIFESTO

### WHO WE ARE

No al Carbone is a movement made up of free citizens of no particular political or religious affiliation who share a democratic philosophy. They are mothers, fathers and children, supporters of critical thought, who love their homeland and join together to fight in order to give dignity back to an area which has been exploited and plundered by the energy and petro-chemical industries.

## OBJECTIVES

NAC produces and promotes informative and opinion-based campaigns aimed at the general public. It works to raise awareness in the political classes, local administration, and at national government level. It organises mass protests, protects the land and keeps guard against further ill-advised bureaucratic decisions affecting the local environment and community.

## WHY?

Decades of unchecked industrial development have led to Brindisi being identified as an 'Area at High Risk of Environmental Crisis' (Law number 349/1986/art.1), and as a 'Site of National Interest for Regeneration' (Law number 426, 1998). The incredible quantity of pollutants present and their particularly dangerous nature have had a devastating impact on the health of the local population and environment.

(Environmental Resistance, 2014c)

From my perspective as a photographer working in a foreign country, the advantage of working alongside NAC activists was that they could supply me with local knowledge, assist me in translation and interpretation, and drive me to key locations. As such, I was totally dependent upon my contacts in Brindisi, in order to make the images. The photographs were shot over the duration of ten days; mostly in the morning when the rising dew created a misty atmospheric effect before the blue Mediterranean skies announced the beginning of the day. My motivation for shooting under the misty light was to obscure my own presence on the perimeter of the industrial facilities I was photographing and to create a murky and oppressive feeling to the photographs, which was analogous to the pollution of the Brindisi air by the coal power stations. The concept behind my narrative approach to making the series was to document the transportation of coal from the docks at Brindisi to the Cerano Power Station at the southern most extreme of the Industrial Zone, whilst covering other strategically important locations in between.

From an environmental science perspective, the prospect of working in the Brindisi region was interesting because industrial pollution in this area can be measured in the air, land and sea. I discovered, however, that because the great majority of pollutants typical of this area were complex organic compounds such as PAHs (Polycyclic aromatic hydrocarbons), as opposed to minerals such as iron, copper etc., which populated the

*Mynydd Parys & Afon Goch* location. This was a problematic discovery, because my colleague at the University of Hull lacked the financial resources necessary to test for such complex hydrocarbons. As a result, the extended captions in the *No Al Carbone* photobook refer to published scientific data only. After our attempts to combine mineral sample data and photography in the *Mynydd Parys & Afon Goch* publication, the inability to take mineral samples in Brindisi was something of a setback, however, the extremely serious nature of the environmental problems present in Brindisi highlighted the fact that our modest resources were unable to deal with the scientific implications of the problems in this location. Many of the studies referred to in the *No Al Carbone* photobook support the assertion that the residents of Brindisi suffer from elevated levels of COPD (Chronic Obstructive Pulmonary Disease) and a heightened risk of contracting a variety of cancers, whilst newborn babies are more likely to suffer from congenital birth defects.

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